The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE:

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1100—Vol. XXVI.] LONDON, SATURDAY, SEPTEMBER 20, 1856. {Stamped .....Sixpence. Unstamped...Fivepence.

MR. JAMES CROFTS, MINING AND SHAREBROKER, No. 1, FINCH LANE, CORNHILL, LONDON, TRANSACTS BUSINESS in BUYING and SELLING, for immediate cash.
DIVIDEND MINES, well selected, are the best of any known investments—paying from 15 to 20 per cent. per annum in dividends. The choice of NON-DIVIDEND MINES for speculation requires careful discrimination.
Mr. Crofts is a BUYER or SELLER of the following:—Alfred Consols, Bedford United, Wheal Wrey, Sortridge Consols, North Basset, West Basset, Trewetha, Wheal Buller, Rosewarne, Wheal Edward, West Providence, Wheal Kitty (St. Agnes), Wheal Bowen, Lelant Consols, Wheal Kitty (Lelant), Vale of Towy, East Russell, Bryn-Galla, Hall, Collacombe, St. Austell Consols, Herward United, Providence, Boscean, Polladack, Gawton United, Eaglebrook, Ding Dong, Wheal Mary Ann, Great Hewas, Wheal Buller, Wheal Basset, United Mines (Gwennap), East Tamar, Cubert United, Wheal Brewer, Bryntail.—Mr. Crofts is a BUYER of South and East Tamar.
The market for good, and especially DIVIDEND, shares is advancing.

MR. JAMES B. BRENCHLEY, No. 2, PINNER'S COURT, OLD BROAD STREET, LONDON, is a BUYER of the following, for cash delivery of transfer, and purser's certificate of registration:—

Alfred Consols.	10 Mary Ann.	50 Great Baddern.
Wheal Basset.	100 Pedn-an-drea.	100 Gawton United.
Wheal Buller.	50 Great Alfred.	10 Porkellis United.
South Frances.	10 North Frances.	100 Tamar Consols.
North Basset.	5 Ding Dong.	10 Par Consols.
West Basset.	25 Hender.	50 Rosew. and Herland.
Trewetha.	10 Wheal Wrey.	10 Clijah and Wentworth.

Parties requiring any of the above, can be supplied at market prices. Business transacted in Railway, Insurance, and other securities.

MR. WILLIAM MICHELL CONTINUES to DEAL in ALL DIVIDEND and good PROGRESSIVE MINES, at exceedingly close prices. Cash given in exchange for transfers to all well-known parties; and parties of responsibility can have shares registered previous to payment.
Money advanced on Mining Shares.
3, Austinfriars, Old Broad-street, London, Sept. 19, 1856.

MESSRS. WILLMOTT AND CO., of 68, OLD BROAD STREET, STOCK and SHARE DEALERS, are always BUYERS and SELLERS of DIVIDEND-PAYING and other PROMISING MINES. SALES and PURCHASES effected in BRITISH and FOREIGN FUNDS, BANKS, the various STEAM NAVIGATION COMPANIES, and every description of security. A Stock Exchange list forwarded to all parties doing business with this firm.

GEORGE SPRATLEY has for POSITIVE SALE the following SHARES, or any part thereof:—

Wheal Margery, £36.	20 Pedn-an-drea.	3 Ding Dong, £41¼.
Providence Mines, £61.	10 Wheal Wrey, £8¾.	1 Botallack, £172½.
Prince of Wales, £5¼.	5 East Wheal Rose, £14.	50 West Polberro.
Carnyorth, £5¼.	5 Mary Ann, £38.	10 Gt. Wh. Alfred, £14¼.
Porkellis, £11¼.	50 Vale of Towy.	20 South Tamar, £3¾.
West Frances, £19¼.	50 St. Day United, 10s.	5 Gt. Sou. Tolgus, £10½.
North Buller, £4¼.	5 Wheal Uny. £4¼.	50 Wheal Zion.
South Devon, £3¾.	1 Boscean, £87½.	20 Boiling Well.
And will BUY at market price:—		10 Clijah and Wentworth.
Alfred Consols.	20 South Buller.	20 Marke Valley.
Pendeen.	3 Fowey Consols.	50 Wheal Grenville.
Wheal Uny.	50 Tehidy.	

15, Old Broad-street, London.

MR. GEORGE BUDGE, of 4, BIRCHIN LANE, CORNHILL, LONDON, has SHARES FOR SALE at the following prices:—

Botallack. £175.	20 No. Wh. Robert, £20½.	40 Wheal Zion, 11s. 6d.
Bedford United, £7.	2 Mary Ann, £39.	20 Wheal Grenville, £22¾.
Cubert, 5s.	55 Oola.	100 West Sortridge.
Carn Brea.	2 Providence, £62.	10 Wheal Wrey, £8¾.
Ding Dong, £42½.	40 Pedn-an-drea, 21s.	10 Wheal Emma.
East Frongoch, 4s.	25 Queen of Dart.	100 West Par, 6s.
Gawton.	2 Rosewayne, £70.	2 West Sharp Tor, £52.
Gt. Wh. Alfred, £14¾.	South Tolgus, £147.	10 Wheal Arthur.
Gonamena, £29¼.	100 South Devon Cons., 8s.	20 Wheal Edward.
Gt. So. Tolgus, £10¼.	50 United Mines (Tavist.)	1 West Frances, £19¾.
Great Tregune, £2.	35s.	

Mr. Budge is a BUYER of—

Dolcoath. £143.	1 Providence, £60.	20 Hender, £3¾.
Gt. Sou. Tolgus, £9½.	1 South Tolgus, £140.	20 Hingston Down, £2¾.
Great Sheba, £1¾.	50 Wheal Zion, 9s. 6d.	1 Grambler.

MR. H. G. SHARP has the following SHARES FOR SALE:—

10 Bed. Uni., £8¾.	50 Hawkmoor, 6s. 6d.	100 So. Dev. Gt. Con., 7s. 3d.
Bell. & Bass. Uni., 37s.	100 Lady Bertha.	20 Severn, £1¼.
Colonial Gold, 1s.	30 Pedn-an-drea, 22s. 6d.	50 Tamar Consols, 21s.
Devon Wh. Buller, 23s.	50 Penecrse Consols, £2.	50 Tincroft, £4¼.
Duke of Cornw., £18.	20 Queen of Dart, 35s.	100 West Sortridge, 2s. 6d.
Gamblesly Fell, 10s.	100 Sortr. and Bedf., 1s. 9d.	100 Wheal Langford, 6s.
Hingst. Down, £2 13s.	50 South Tamar, £¾.	20 Wheal Edward, £2.

Mr. Sharp is a BUYER of the following, or any part:—

Bedford United, £5¾.	20 Great Alfred, £14¼.	10 Trewetha, £3¼.
Copper Hill, £135.	50 Great Sheba, £1¼.	50 Wh. Grenville, £2¼.
Calstock Consols, £1.	50 Gt. Wh. Badd., 18s. 6d.	5 Wh. Kitty (Lel.), £9¾.
East Frongoch, 1s.	100 Okel Tor, 7s. 3d.	300 West Sortridge, 1s. 6d.
Gt. Sou. Tolgus, £9½.	30 Sortridge Cons., £2¼.	100 W. Collacombe, 3s. 6d.

Offices, 2, Church-court, Clement's-lane, Lombard-street, London.

MR. A. H. GARLAND has the following SHARES FOR SALE:—

20 Severn, 20s.	5 Swanpool, £3¾.	20 Queen of Dart, 35s.
West Alfred, 20.	20 Wheal Grenville, £2¼.	20 Hingst. Down, £2¾.
W. Wh. Frances, £19¾.	50 Sort. and Bedf., 1s. 9d.	4 Duke of Corn., £18.
Sortridge Cons., £2¼.	5 Par Consols, £20.	50 Dev. Wh. Bull., 22s. 6d.
Trewetha, £3¾.	1 Rosew. United, £70.	100 West Sortridge, 2s. 6d.
South Tamar, £1.	100 West Grenville, 3s.	5 Bedford United, £6¾.
West Collacombe, 5s.	10 Wheal Edward, £2¾.	20 E. Gunnis Lake, £2¼.
Tincroft, £4¼.	50 Vale of Towy, 21s.	50 Wh. Langford, 5s. 3d.
Tamar Consols, 21s.	50 Bul. and Bass. Uni., 30s.	20 Wheal Zion, 12s. 6d.
Great Wh. Vor, £3 1s.	50 Lady Bertha.	10 Great Alfred, £17¾.

Mr. Garland deals in all the dividend and progressive mines, and will be happy to receive any instructions, which will be promptly attended to; and requests that gentlemen wishing to purchase or sell shares will send positive orders.
Offices, 2, Church-court, Clement's-lane, Lombard-street, London.

NOTICE OF REMOVAL OF OFFICES.—The BUSINESS of the following MINES will in future be CONDUCTED at 9 and 10, GRESHAM HOUSE, or 25, OLD BROAD STREET, LONDON, instead of 3, Austinfriars, as heretofore:—

Old Tolgus United.	South Gorland.
Buller and Basset United.	South Buller and West Penstruthal.
	Carnewas.

The present is a remarkable epoch in the history of mining adventure. The mistrust not only engendered, but openly expressed, in joint-stock banks, and other joint-stock companies, consequent upon the failure of the Royal British Bank, has been a great impetus to British mines, which are conducted upon the Cost-book system,—meetings are held bi-monthly or quarterly, and the shareholders themselves examine and pass the accounts of pursers and managers, which not only afford frequent opportunities of testing their accuracy, and gaining correct data relative to the future prospects of the future, but also demonstrates forcibly the advantages and security held out to capitalists over other descriptions of property, especially joint-stock. Again shareholders seldom possess or exercise any control over the affairs of the institutions in which they have embarked their money.
The annual dividends paid by the following companies, amounting to 15, 17½, and 20 per cent. per annum, render the present an advantageous opportunity for investment:—

Consuet.	Buller.	South Frances.
Providence.	Great Work.	Margaret.
Mary Ann.	Kitty.	Alfred Consols.
North Basset.	West Basset.	East Pool.
Ocean.	Ding Dong.	Tincroft.
South Caradon.	Botallack.	Levant.
Devon Great Consols.	Carnyorth.	Wrey.

And many others. Whilst the undermentioned progressive mines are likely soon greatly to advance in current value, without the corresponding risk attached to speculative property in general:—

Mary.	South Ellen.	Great Alfred.
Tolgus.	Lelant Consols.	West Stray Park.
South Tolgus.	Grenville.	West Grenville.
Tolgus United.	South Condurrow.	South Seton.
Basset and Basset United.	St. Day United.	Pendeen.
Carnwas.	East Rose.	South Garras.
South Gorland.	Edward.	East Alfred.
Bull. & W. Penstruthal.	Great Busy.	Great Vor.

A weekly list of prices forwarded per post upon receipt of 10s. 6d. annually.
Statistical information afforded gratuitously.
Shares bought and sold on commission of 2½ per cent.
Plans and sections, together with practical reports, furnished from approved agents resident in the several mining districts.
All business negociated promptly, and cash payments made as soon as validity of transfer is ascertained.
R. TREDINNICK, Broker and General Dealer.
London, Sept. 19, 1856.

MR. R. TREDINNICK WILL LEAVE LONDON NEXT WEEK for his BI-MONTHLY TOUR OF INSPECTION of the MINERAL DISTRICTS of CORNWALL. Letters will reach him addressed Camborne, Cornwall.

GEORGE MOORE, DEALER IN MINING SHARES, 1, CROWN COURT, THREADNEEDLE STREET.
Cash given on receipt of transfer.

MR. JOSEPH J. REYNOLDS, STOCK AND SHAREBROKER, No. 21, THREADNEEDLE STREET, LONDON, begs respectfully to call the attention of all parties interested in mining pursuits to the facilities which his office and extensive connections afford for the PURCHASE and SALE, on the best terms, of all descriptions of NATIONAL and RAILWAY STOCKS, but more especially of FOREIGN and BRITISH MINES, in which his numerous friends are largely interested, and in which his transactions are very extensive.
Owing to the depression, caused by the late war with Russia, in the value of mining property, from which it has not yet recovered, and the present high prices of metals, this description of property may now be purchased at such rates as to afford unusual advantages.
At the present moment Mr. Reynolds is enabled to offer shares in several mines, in the most productive localities, and of the highest character, at such rates as he is confident will result in great profits to investors.
Having great experience in mining, an extensive acquaintance with the best mines, and being in constant communication with the most skilful agents, Mr. Reynolds is always in a position to give reliable information, and will have pleasure in giving such advice only to investors as he feels confident will result in mutual advantage.

MESSRS. POWELL AND COOKE, DEALERS IN MINING SHARES, No. 8, HERCULES CHAMBERS, OLD BROAD STREET, LONDON.—The above continue to DEAL in the SHARES of all the leading DIVIDEND and good PROGRESSIVE MINES.
On the 15th August we advised the purchase of Great Wheal Alfred Shares, since which period an advance of 250 per cent. has taken place; we are of opinion that there will be a further rise in the price, and that this mine will soon rank among the most important of the Dividend List.—Sept. 20, 1856.

DIVIDEND MINES, well selected, are the BEST of all PUBLIC INVESTMENTS, paying, as they do (in dividends every two or three months), from 20 to 30 per cent. per annum. NON-DIVIDEND MINES, carefully chosen, frequently advance in price 500 per cent., or more.
PETER WATSON, MINING BROKER, STOCK and SHARE DEALER, having 11 years' experience in every department of mining and its management, together with an extensive and regular correspondence with mining agents and others in Cornwall, Devon, and elsewhere, is enabled to judge of and select mines of intrinsic value. Peter Watson, being a Member of the Mining Exchange, will forward a list of prices when required, and may be consulted daily as to purchases, sales, &c.
57, Threadneedle-street, London, Sept. 20, 1856.

MR. E. GOMPERS, No. 98, GRACECHURCH STREET, has BUSINESS TO TRANSACT in most of the leading DIVIDEND and PROGRESSIVE MINES. Also, in Life, Fire, Maritime Insurance, Steam Navigation, various Gas Companies, and various Joint-Stock Companies' Shares, returning regular dividends.

MR. HERRON, being in the habit of advertising shares for sale at stated prices, fears that he may be considered as one of the parties to whom your correspondents "Justicia" and "Looker-On" refer; and, therefore, begs to acquaint the public that he is at all times in a position to CARRY OUT the SALE of any SHARES which are ADVERTISED by him, provided that an application be made within a reasonable period after his advertisement appears.
Mr. Herron begs to state that he will continue to adhere to the same line of conduct for the future, which he trusts will be duly appreciated by those disposed to favour him with their confidence.—2, Adam's-court, Old Broad-street, Sept. 19.

JAMES HERRON has FOR SALE the following SHARES, at the prices quoted, and FREE OF COMMISSION:—

5 Alfred Consols, £15¾.	10 Lady Bertha.	10 Stray Park, £6 1s. 3d.
1 Basset, £290.	3 Margery, £34 18s. 9d.	5 South Carn Brea.
5 Boiling Well, £7¼.	1 Mary Ann, £36¼.	20 Treleigh (New), 9s. 9d.
1 Buller, £330.	5 Mill Pool, £3 13s. 9d.	20 Treleigh (Old), 14s. 9d.
10 Bryntail, £3¾.	5 North Robert.	5 Trelawny, £22½.
30 Ballyvirgin, £2¼.	30 North Downs, £2¼.	20 Trewetha, £2¾.
10 Bwlch Consols, £2¾.	5 North Trelawny.	20 Trehane, 12s. 9d.
20 Carnyorth, £5¼.	3 North Frances, £10¾.	10 Tincroft, £4 3s. 9d.
2 Cefn Brwyno, £65.	100 North Towy, 3s. 9d.	100 Tamar Consols, 25s. 3d.
20 Drake Walls, £2.	30 Pem. and E. Crin., 11s. 9d.	5 Trefusis.
1 Ding Dong, £38¾.	5 Porkellis United.	50 Tavy Consols, 4s. 9d.
1 East Daren, £85.	1 Provid. Mines, £62¾.	20 Vale of Towy, 18s. 9d.
1 East Wh. Rose, £11⅞.	20 Pedn-an-drea, 25s. 6d.	1 Wheal Basset, £290.
1 Grambler.	5 Pendeen, 12s. 9d.	15 Wheal Zion.
20 Great Wh. Vor, £2¾.	20 Rosew. and Herland.	5 Wheal Edward.
10 Gilmar, £2¼.	1 Rosewarne, £73¾.	5 Wh. Hender, £4 15s. 6d.
5 Great Alfred, £14¾.	6 So. Crofty, £5 17s. 6d.	10 Wheal Wrey, £8¾.
20 Hawkmoor, 8s. 3d.	10 Sou. Condurrow, 9s. 9d.	2 West Provid., £18¾.
5 Holmbush, £1 14s.	1 South Frances, £370.	2 Wheal Grenville.
5 Kelly Bray.	20 St. Day United, 19s.	10 West Sortridge.
5 Kitty (St. Agn.), £4¾.	1 South Tolgus.	5 West Alfred Consols, £12 18s. 9d.
10 Ludcott.	5 St. Aub. & Grylls, £2¾.	

2, Adam's-court, Old Broad-street, London, Sept. 19, 1856.

MR. LELEAN, 4, CUSHION COURT, OLD BROAD STREET, LONDON.—BUSINESS TRANSACTED in every description of BRITISH STOCKS, FUNDS, and SECURITIES; also, BRITISH and FOREIGN MINES.
WANTED.—Great Alfred, South Cuddra, Swanpool, North Buller, Bell and Lanarth, Grenville, South Frances, Wheal Wrey, St. Austell Consols, Trewetha, Buller, Basset, Margery, Stray Park, Molland.—Apply, stating the number and price, to Mr. Lelean, 4, Cushion-court.

MR. ADAM MURRAY, CONSULTING MINING ENGINEER, 10, HERCULES CHAMBERS, OLD BROAD STREET, CITY.

MR. A. H. PATTERSON, C.E., LAUNCESTON, will UNDERTAKE SURVEYS, PLANS, &c., of MINES and MINERAL PROPERTY.

MR. B. LAMBERT, STOCK, SHARE, AND MINING AGENT, 3, HATTON COURT, THREADNEEDLE STREET.

MR. WM. SIMS, MINING SHAREBROKER AND GENERAL COMMISSION AGENT, REDRUTH, CORNWALL.

MR. ALFRED VOSPER, ASSAYER, TAVISTOCK.

MR. A. FRANCIS, MINING AND GENERAL COMMISSION AGENT, MAY BE CONSULTED at present at No. 164, FLEET STREET (Anderton's Hotel), from Two until Four P.M.
British and Foreign Mines inspected and reported on.

MR. F. LISABÉ, C.E., CONSULTING MINING ENGINEER, OFFICE, 2, DAME STREET, DUBLIN.
Mr. Lisabé, may be CONSULTED personally, or by letter. His long experience in Ireland will be found useful to capitalists desirous of investing money in mining and other speculations in that country.

MR. F. W. STOCKWELL, 75, OLD BROAD STREET, CITY, will give the best information and advice to persons PURCHASING BRITISH and FOREIGN MINING and RAILWAY SHARES, STOCKS, &c. Having facilities for acquiring a minute and, at the same time, comprehensive knowledge of British mines of all classes, he feels confident of directing purchases and sales with advantage. Promptitude and immediate cash settlements may be relied on. References given if required.

WEST END MINE AND QUARRY OFFICES, 5, WATERLOO PLACE, PALL MALL.

MESSRS. BRUNTON AND CO., ENGINEERS AND MINERAL SURVEYORS, undertake the MANAGEMENT and WORKING OF MINES, QUARRIES, &c., and CONDUCT the LONDON AGENCY of all MINERAL PROPERTIES in their offices with system, economy, and regularity.
Messrs. Brunton and Co. beg to inform proprietors of mines, &c., that the business of these properties is carried on in their office upon the following principles, viz.:—
Accounts systematically and closely made up.
Statements in detail, and clear summaries of finance and expenditure.
Entire and impartial openness of books, reports, and documents, to all shareholders, for perusal or extract.
Immediate communication of any important occurrence to the shareholders.
MINERAL PROPERTIES SURVEYED, and ESTIMATES OF MACHINERY, PLANT, and COSTS OF WORKING FURNISHED.

ON SALE.—ONE GALLOWAY'S PATENT BOILER, nearly new, 24 ft. by 5 ft. 8 in.
ONE CYLINDER BOILER, 18 ft. by 4 ft. 8 in., with one flue through, new.
ONE ditto, 20 ft. by 6 ft., with two flues and steam chest, new.
ONE FOUNDRY FAN, new.
ONE 30-horse HORIZONTAL ENGINE; new first-class engine.
Apply to Thos. Perry and Sons, ironfounders, Bilston.

THE MIDLAND IRON COMPANY, ROTHERHAM, YORKSHIRE, MANUFACTURERS OF RAILWAY TYRES AND AXLES FOR LOCOMOTIVE ENGINES, CARRIAGE AND WAGON WHEELS. From the tests to which this iron has been submitted by engineers and railway companies during several years, its superior quality has been generally acknowledged, and can be unhesitatingly affirmed.

MOST IMPORTANT SALE OF VALUABLE AND EXTENSIVE MINING PROPERTY AND MACHINERY.
IN THE PARISH OF GWENNAP, IN THE COUNTY OF CORNWALL.
MR. T. P. THOMAS WILL SELL, BY AUCTION, at Garraway's, Change-alley, Cornhill, London, on Wednesday, the 8th of October next, at Twelve for One o'clock precisely, in One Lot, subject to such conditions as will be then and there produced, ALL those extensive and valuable MINES, known as the GREAT CONSOLIDATED MINES, situate in the parish of Gwennap, together with ALL the MACHINERY and MATERIALS thereon, comprising—
2 85 in. cylinder pumping engines, with 7 boilers weighing about 72 tons.
1 80 in. cylinder pumping engine, with 4 boilers weighing about 40 tons.
5 24 in. winding engines, with cages, and about 33 tons of boilers.
1 22 in. winding engine, with cages, and a crusher attached, and about 6 tons of boilers.
1 21 in. winding engine, with cages, and about 6 tons of boilers.
2 20 in. winding engines, with cages, and about 14 tons of boilers.
660 fms. of 13, 14, and 15 in. pumps.
19 brass poles, 12, 13, and 14 in., about 10 ft. long.
3 brass workings, 12, 13, and 14 in., about 10 ft. long.
9 cast-iron balance-bobs, weighing upwards of 100 tons.
800 fms. of 12, 13, and 14 in. main rods, with plates, pins, connections, and everything thereunto belonging, and about 6 tons of brass seats and valves.
2500 fms. of 6½ in. flat rope.
500 fms. of 8 in. flat shieves, pulleys, and stands.
7 lathes, varying in size from 1 ft. to 4 ft.; screwing and boring machines; with gear for driving the same.
1770 fms. of capstan-ropes, from 6 to 14 in.
6 10 and 12-arm capstans.
Together with the counting-house furniture, smiths and miners' tools, and every other requirement necessary for carrying on the future working of these mines.
The auctioneer respectfully calls the attention of capitalists to this important property, it being situated in the best mining district in Cornwall; and, although having been at work for a considerable time, still presents very many encouraging points yet to be accomplished, the result of which is looked forward to by practical mine agents of the highest respectability and attainments with the greatest confidence of success.—Authority to inspect the mines, or any further information, may be obtained by applying to Mr. Francis Pryor, Redruth; Mr. Thomas Field, 2, Crown-court, Threadneedle-street, London; to Mr. Jno. Balster, Sidmouth House, Reading; or to the auctioneer, 2, Crown-court, Threadneedle-street, London.

MR. WM. MOORE, 1, CROWN COURT, THREADNEEDLE STREET, has FOR SALE the following SHARES, or any part, FREE OF COMMISSION:—

5 Alfred Consols, £16.	1 Roskear, £97½.	10 Wheal Wrey, £8¼.
10 Hingston Down, £3¼.	5 Par Consols, £20½.	1 Wheal Buller, £345.
2 Mary Ann, £37.	10 South Tamar, 18s. 6d.	50 Vale of Towy, 1s.
5 North Basset, £39.	20 Trewetha, £3¾.	

The above are all dividend-paying mines, and many of them selling at prices worthy the immediate attention of capitalists.

10 Arthur, £5¼.	2 Gram. and St. Aub., £60.	100 Sortridge and Bedford, 1s. 10½d.
5 Boiling Well, £7.	20 Ludcott, £1¾.	
1 Collacombe, £55.	5 Porkellis, £11¼.	1 South Garras, £95.
10 Devon Buller, £1.	10 South Ellen, £9¼.	5 Wheal Edward, £2¼.
2 East Rose, £12¼.	30 South Dev. Con., 6s. 6d.	20 Wh. Grenville, 48s. 9d.
10 Great Alfred, £13¾.	20 South Cuddra, 21s.	

N.B. Any purchaser of undoubted respectability can have shares REGISTERED, and receive CERTIFICATES of same, previous to payment.
Business transacted in every description of British and Foreign Mining Shares.
Cash given on receipt of transfer.—1, Crown-court, Threadneedle-street.

CAPT. THOMAS DUNN, of TAVISTOCK, undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND, IRELAND, SCOTLAND, or WALES. No objection to take the management of any mine or mines in the neighbourhood of Tavistock.

CAPTAIN RICHARD HENRY VERRAN (late of Cornwall) undertakes to INSPECT, REPORT, and SURVEY any MINES or MINERAL PROPERTY in ENGLAND, IRELAND, SCOTLAND, or WALES. The highest references can be given as to character and ability on application.—Address, Brook House, Llandiloes, North Wales.

CAPT. H. T. VERRAN, M.E., having ARRIVED in CORNWALL from North Wales, INSPECTING and SURVEYING MINERAL PROPERTY, he begs to inform his friends, &c., that he UNDERTAKES the same, either in DEVON or CORNWALL, at any reasonable terms.—Address, H. T. Verran, M.E., St. Minver, Wadebridge, Cornwall.

NORTH AND SOUTH WALES.—Capt. JAMES ROACH (Manager of the Bryntail Mines, near Llanidloes, Montgomeryshire) OFFERS HIMSELF to INSPECT and REPORT upon MINES and MINERAL PROPERTY in any part of North and South Wales. Twenty years successive application in mines of all descriptions, enable him to impart sound judgment to those who may avail themselves of his services.—Sept. 19, 1856.

MINING OFFICES.—Mr. T. CARTHEW, ST. CLARE STREET, PENZANCE.
Offices of the West Wheal Virgin Tin Mining Company.

MR. W. H. BRUMBY, STOCK AND SHAREBROKER, 1, QUIET STREET, BATH.
BUSINESS TRANSACTED in every class of MINING PROPERTY.
WANTED.—West Polberro, Bryntail, Alfred Consols, Boscean, Wheal Zion, and Grambler and St. Aubyn.

MR. J. H. CLEMENT, CONSULTING MINING ENGINEER AND METALLURGIST.
OFFICE (First Floor), 4, UNION COURT, OLD BROAD STREET, LONDON.
Patent processes examined, and the practicability of such being useful for operating on large amounts of ores declared.

JNO. W. PERKINS, F.C.S., MERCANTILE, AGRICULTURAL, AND CONSULTING CHEMIST.
J. W. Perkins begs to inform his friends and the public interested in mines, agriculture, and mercantile transactions, that he may be CONSULTED upon subjects pertaining to SCIENTIFIC CHEMISTRY. ANALYSES and ASSAYS performed.
2, Poplar-terrace, Poplar.

ELECTRO-CHEMICAL REDUCTION OF ALL THE METALS FROM THEIR ORES.—Mr. CALVERT'S LATEST DISCOVERIES enable him to TREAT ORES at the MOUTH of the MINE, thereby saving the great expense of carriage and fuel. His process is inexpensive, and entirely supersedes the disadvantages of the old acid method. Those who wish to avail themselves of this important invention, can apply to Mr. Henson, 113, Strand, London.

MINES SURVEYED, AND PLANS AND SECTIONS MADE of any PROPERTY at HOME or ABROAD, by Mr. JOHN CALVERT, MINING GEOLOGIST and MINERALOGIST, whose great practical experience in Foreign and English mining well adapts him for exploring maiden ground, valuing lodes, veins, and setts, and whose judgment is constantly the means of enhancing the value of mineral property, which would otherwise be neglected, or improperly worked.
189, Strand, London.

ESGAIR MWYN MINING COMPANY.—TO BE SOLD, from THREE to SIX HUNDRED SHARES in this undertaking, at a reasonable price.—Address, "F. F.," at Messrs. Dunn and Duncan's, stationers, 9, Fleet-street.

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GALLT-Y-FFRITH RHEDYN LEAD MINING COMPANY (LIMITED).—5000 shares at £10 each.

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Offices, 9, Austinfriars, Aug. 5, 1856. WILLIAM EVANS, Sec.

TREBURGETT CROWAN CONSOLIDATED COPPER MINING COMPANY (LIMITED BY ACT OF PARLIAMENT).

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Capital £50,000, in 5000 shares of £10 each.—Deposit £5 per share.

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BROKER—Peter Watson, Esq., 57, Threadneedle-street.
SECRETARY—Mr. William Evans.

OFFICES,—No. 9, AUSTINFRIARS, LONDON.

Applications are yet required for the 3000 shares unsold; the whole must be applied for prior to an allotment being made.

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Prospectuses may be obtained at the offices of the company.

WILLIAM EVANS, Sec.

FORM OF APPLICATION FOR SHARES.

To the Directors of the Treburgett Crowan Consolidated Copper Mining Company (Limited).

GENTLEMEN,—I request you to allot me shares in your company, of £10 each, on which I enclose you a deposit of £1 per share, and hereby undertake to accept such shares, or any less number, and to pay the further sum of £4 per share on allotment, and the further calls as required, up to £10 per share, subject to the provisions of the Act of Parliament which limits liability to shareholders.

I am, Gentlemen, your obedient servant,

Name in full.....
Residence .....
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Signed, G. E. MAGNUS.

To the Proprietors of the Machno Slate and Slab Quarries.

Liverpool, Oct. 18, 1855.—DEAR SIR: The experiments which I have tried on the specimen of slate, in reference to its capability of resistance to acids, enable me to pronounce it in every way capable of retaining boiling vinegar, without injury either to its own substance, or to the contained vinegar. A piece of the slate, weighing 95 grs., was exposed for 26 hours to the action of cold strong nitric acid; it was then boiled in the same acid for 20 minutes, and when washed, dried, and weighed, was found not to have lost perceptibly in weight. This I consider the most conclusive experiment. Signed, GEO. C. HUSON.

Wm. Orme Carter, Esq., Machno Slate and Slab Company.

All communications must be addressed to the resident director, Mr. T. H. WHEELER, Conway, North Wales.

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Truro, Sept. 10, 1856. W. H. BOND, Hon. Sec.

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A 50-in. cylinder pumping-engine, a 24-in. cylinder winding and crushing-engine, and all necessary buildings, are already erected on West Crinnis Mine; the main engine-shaft is sunk to 20 fms. below an adit of 20 fms.—between the Regent, Bell's, and Kemp's lodes—so as to take the very important junction of them at the earliest point. Regent main engine-shaft is sunk to the 90. It is proposed to erect another 50-inch cylinder pumping-engine at this shaft, when the mines will possess ample machinery for developing them to a very great extent.

The proposed capital of the company is divided into 6000 parts or shares, 3000 of them being preference shares, and bearing a preferential dividend of 10 per cent. of the profits—over and above that payable on the 3000 ordinary shares—for a period of five years after the payment of the first dividend by the company; thereafter to rank as ordinary shares. The 3000 ordinary shares are held by gentlemen who recently formed the "West Crinnis Mining Company," and a considerable number of the preference shares are already taken up; on these 3000 shares three calls of 10s. each are made,—payable, 10s. on allotment, 10s. on the 15th October, and 10s. on the 15th December, 1856,—which it has been determined shall entitle them to rank as of equal value with ordinary shares in the West Crinnis Company, upon which £3 17s. 6d. per share has been paid, in addition to the preferential dividend of 10 per cent. above named.

The deposit will be returned without deduction if two-thirds of the shares are not applied for.

Reports on the mine by Capts. John Webb, J. Jenkin, and W. Kemp, are contained in the detailed prospectus.

Prospectuses may be had on application to the purser, Mr. T. LEWIS, Corn Exchange-buildings, Birmingham; Mr. WM. CHARLES, 27, Austinfriars, City, London; Mr. J. G. PARKER, 53, Essex-street, Strand, London; Mr. W. J. PEIRCE, Waterloo-terrace, Northampton; Capt. JOHN WEBB, St. Austell, Cornwall; Mr. ROWLAND HILL, 3, Mount-place, Blechynden, near Southampton; Mr. J. MOSS, 53, Broad-street, Reading, Berkshire; or, Mr. HENRY HALL, Bromly-villa, Gloucester; to either of whom applications for shares may be addressed.

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MINING IN JAMAICA.

The reports received by the last mail are very satisfactory as regards mining in the colony, and the following particulars are condensed from various sources. It is unnecessary to state that, should mining prove successful, it will be a great boon to the island, and materially aid to restore its prosperity, and we hope the exertions made by all parties may be crowned with the success they merit:—

The Clarendon Consolidated Mining Company of Jamaica have advices from Capt. F. C. Harpur to Aug. 23:—At Stamford Hill, the lode in the stopes in the bottom of the 22 continues about 9 ft. wide, composed of spar, flookan, iron, and yellow and variegated copper ore, saving work. The lode in the 35, north-east of shaft, is now about 6 ft. wide, presenting a favourable appearance, composed of flookan, spar, oxide of iron, green and blue carbonate, intermixed with yellow copper ore. The lode in the stopes in the back of this level continues very wide, producing some saving work for the dressing-floors. At the shaft sinking below the 35 the portion of the lode carrying down is composed of flookan, iron, green carbonate, and black oxide, interspersed with yellow copper ore. The water is decreasing in this place. In the 58 cross-cut they have met with a small branch, composed of flookan.

At the Wheal Jamaica Copper Company meeting, on Aug. 25 (Mr. John West, the purser, in the chair), the report from the committee of management was read, in which "They refer with satisfaction to the latest intelligence from the mining agent, Mr. G. B. Nethersole, who, under date 12th inst., reports as follows:—'During the last week, the new stopes in the back of No. 1 have much improved; we have a branch of ore, from 4 to 6 in. wide, which is yielding from 4 to 5 cwts. of ore per fm. In Schutes's stopes, in the back of No. 2, the lode is still holding out exceedingly well, yielding on an average about 15 cwts. of ore per fm. Ellison's winze, sinking below No. 3, is now down nearly 9 fms., and we expect to hole to the 50 in a very short time. The lode in the 50 is about 5 ft. wide, but at present disordered; there is a fine stream of water issuing from the end, from which we expect soon to meet with a fine branch of ore again. In the dressing department, we are busily engaged in getting the ore that we have lately taken out from the 50, and from the stopes, ready for market, which will amount to not less than 4 tons, besides what is already at the pit's mouth—say, from 3 to 4 tons of undressed stuff. On the whole, the appearances throughout the mine are very encouraging, and I would certainly recommend that as little time as possible should be lost in commencing one or two lower cross-cuts, in order more fully to develop the mine, feeling fully assured you will be amply rewarded for the outlay.' On the 19th he states—'By this post I have only the pleasure of communicating to you that we have holed the winze in No. 3 to the 50. I do not enclose a report by this post, as the mine is looking as well as usual. We are daily expecting a change in the 50. The ore dressed on the floors is being carried to Retreat.'" The later reports from Charing Cross Mine continued to be extremely favourable. The stopes throughout are yielding some first-class ore, and in improving quantities, and it is highly probable that in the course of a few months the company will be enabled to make another considerable shipment of ore. In the 50 the ground continues to improve, and it is expected that the pitches between that and No. 3 will stope to great advantage. The mine, according to latest accounts, has never looked so well, and the united opinion of practical miners is that it has only to be prosecuted in depth to become speedily a remunerative enterprise. The report also stated that the result of an assay of a stone of ore had produced 30 per cent. of pure metallic copper. Resolutions were passed unanimously adopting the report, and that the directors be authorised to prosecute with the utmost vigour the workings at Charing Cross Mine; and the shareholders leave it to them to determine the extent to which it may be necessary to increase the expenditure, feeling the fullest confidence that a sound discretion will be exercised by them. The notice with regard to the formation of a board of direction in England having been brought under discussion, the further consideration of the subject was postponed until a more favourable opportunity. Votes of thanks were passed to Mr. G. B. Nethersole, for the able manner in which he had discharged his duties as mining agent and engineer, and to the Chairman. The *Whistling Wind* arrived on Tuesday, at Liverpool, with 20 tons of ore, consigned to Messrs. Wilson, Peck, and Co.; when sold, we will give the result.

Capt. Arthur, mine agent of the Ellerslie and Bardowie Company, has announced the intersection of the lode in the deep cross-cut at Salisbury Plain. This lode is one of the most powerful copper lodes known, and should it prove rich in the level at which it has now been intersected, it will add another example in favour of mining in Jamaica. This intersection is the lowest depth from surface at which any lode has yet been penetrated in the colony. A meeting of this company was held on Aug. 14, when the agent's report was submitted, and the committee congratulated the shareholders on the small cost at which the important work had been completed. Although 54 fathoms of ground, some of it of excessive hardness, had been driven in the deep cross-cut, the whole expenses at the mine, up to July 31, had only amounted to 821*l.*, including the erection of a dwelling for the miners. A few tons of good ore had been broken out of the new branch.

The Hope Silver-Lead Mine, of which but little is publicly known, bids fair at no distant period to resolve itself into a highly prosperous enterprise. The mine is in private hands, and is being both scientifically and energetically worked.

The Mount Salus, a new mining adventure for working the promising copper lodes discovered in St. Andrew, has lately started. The veins at Mount Salus were inspected some time ago by Capt. Maynard, who reported favourably on them. The company is in the hands of a few individuals, and there being no lack of capital, immediate operations will be prosecuted, under very favourable circumstances.

At the Rio Grande Mining Company meeting, on Aug. 14, a satisfactory report of the progress of the undertaking was read and unanimously adopted. The mining captain had sunk two pits on the lode at Brookdale, one 10 feet deep the other 8 feet, and after sinking 3 feet in the first, had met with copper ore. A good pile of ore had been broken out, and a promising lode going down in the bottom. He had also been working a vein of ore running almost parallel with No. 3, and about 6 fathoms to the north-east, from which he had broken out some rich ore. For the last six weeks he had been engaged in sinking in the bottom of No. 1. From this lode, also, some fine ore had been taken out, and there was a good branch going down in the bottom. There were several tons of undressed ore at surface. Messrs. Wilson, Peck, and Co., have received a parcel of ore by the *Whistling Wind*, being the first received in this country from these mines: when sold, we shall publish the result.

The *Colonial Standard*, in commenting on mining in Jamaica, says—"The very great importance which is to be attributed to the success of mining enterprise in this island so strongly justifies our frequent recurrence to the progress of this new department of industry, that we offer no excuse for once more drawing public attention to the reports from the mining districts. Whatever may have been the disadvantages under which mining operations were undertaken in the first instance by local companies, it is a remarkable fact that, with a single exception, local enterprise is that which has been alone successful. It is a source of great disappointment to those connected with mining adventure, and, as a consequence, to all who have a direct interest in the country, that the Government should have determined on postponing the geological survey of Jamaica to that of Trinidad. Why the latter island should have this preference we do not precisely understand. In Jamaica, mining enterprise has made considerable advance. If the proposed geological survey is intended to have the slightest connection with the mineral development in the colonies, then certainly Jamaica was the island which pre-eminently claimed the first care of the Government geologist. As it is, Trinidad is to be the first surveyed, and not until then—perhaps in 1859—will Jamaica be visited. If the survey is to be delayed until then we think it had better be wholly dispensed with. The mines now in progress will have decided their fate long before that period, and we are inclined to think very few will care to be informed, as a mere matter of geological science, where the igneous formation commences and the deposited strata cease."

GOLD IN SOUTH AUSTRALIA.—We learn from Adelaide that the Governor has been memorialised to set apart 1000*l.* for the exploration of those localities considered most likely to contain gold. It is believed that a reward of 10,000*l.* to be paid by the Government and the public in equal proportions, in the event of a gold field being discovered, and 2000*l.* spent in the search for it, would in all probability lead to results that would place the colony in a very different position to that which it at present occupies by the side of Victoria. Mr. B. Herschel Babbage, referring to a letter in the *Adelaide Observer*, says—"I observe your leading article upon the question of 'Have we a gold field in South Australia?' in which you very properly point out that the exploration should be made upon a definite principle, instead of at random as hitherto. In 1852, when the Echunga diggings were first discovered, I ventured, after an inspection of the locality, to give my opinion that they would not turn out to be a gold field, in the sense of Bendigo or Mount Alexander, and events have fully justified my prediction. In a report to the Government, which was published in the *Gazette*, I stated my reasons for coming to this conclusion, and pointed out the country to the far north as being the only part of this colony where I thought it probable that a real gold field might be found. In a paper read by me at the Philosophical Society last year, and published in the papers at the time, I went very fully into the subject, and showed, from the geological reports of the gold fields in the neighbouring colonies, that trap or basaltic rocks were almost invariably found in the neighbourhood of their gold fields. This rock is, as far as I can learn, wholly wanting in the settled parts of this colony; but I am led to believe that in the district about Mount Arden basaltic rocks are to be met with, and I write this letter to direct the attention of any party who may be sent out to explore for gold to that part of the country as being the most probable to crown their labours with success."

ANCIENT MINING RELIC.—We have received a tracing of the Roman "pick" found in the old mine which is now being cleared out at Machynlleth, called the Nant-yr-Arian, or Silver River Mine: the handle is 12 in. long, and the cross-head 9 in., of fine-drawn iron, perfectly resembling the pick of the present day. The level has been driven into the old shaft, and works which have not been touched for 1500 years, are now in the course of revival and further development. A piece of old iron hoop taken out is plated with silver by some fortuitous combination in the water, and the pick has also a slight plating upon it. It is a question whether the works in these parts, attributed to the Romans, were not those of the Phœnicians; thus giving even a greater antiquity to them. Mr. Weston, of Machynlleth, is prosecuting this work, and is in possession of this antique treasure. The work is 50 feet deep; and it is to all a marvel how operations of this magnitude were performed by such insignificant tools, unless some other agency was brought to bear upon them.

MR. H. BESSEMER'S INVENTION.—An eminent authority on all matters metallurgical, writing to a friend in Birmingham, says, with reference to Mr. Bessemer's process:—"The idea of producing wrought-iron without mechanical labour is to me ridiculous. He professes to tap off the metal like pig-iron, and what I saw tapped off was as fluid as pig-iron, and apparently at about the same temperature. Now, you and I know something about the infusibility of wrought-iron. As the removal of the carbon is effected, the iron becomes a pasty, comparatively infusible mass; but the oxidation must be carried beyond the degree at which the metal ceases to be liquid (you may be assured that wrought-iron is not melted in Bessemer's apparatus); and how, then, can Mr. Bessemer's jets of air get at the interior of such a mass? It is a manifest impossibility. Imagine a big crucible, like Bessemer's apparatus, containing 7 or 8 cwts. of metal in that state. The process is a modification of the refinery process." Speaking of an experiment at which he was present, he says:—"One or two good practical men, who were with me, said the metal looked to them like 'burnt iron.' There are some curious points to be investigated. An ingot is quite cellular, brittle,—cannot be rolled, without further manipulation, brilliant, and apparently consists of little grains possessing only a slight degree of malleability, agglutinated together." Respecting an experiment on some of the grains of metal, he says:—"They were flattened under the hammer, but the edges were cracked all round. That a kind of cast-steel may be produced I doubt not. Let the puddlers allay their fears, for the present at least, for Bessemer's process, I think (I may be wrong, but I do not think I am), will not replace puddling."—*Birmingham Journal.*

THE LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending September 13 were 10,428*l.* 4s. 1d.

Original Correspondence.

BESSEMER'S INVENTIONS—MANUFACTURE OF IRON AND STEEL.

SIR,—I trust you will not think this communication has been induced by any personal motives, as I have no pecuniary interest in either of the patents referred to, and am led to remark upon them simply because of respecting the motto *Palmam qui meruit ferat*. It appears that the process which is producing so much discussion cannot be worked without Mr. Martien's permission, and that the sole novelty is conducting the operation entirely without the application of heat. I shall refer to this hereafter. My object is to consider the *novelty* of the modification of the process patented, alluded to in the paragraph preceding the claim in Mr. Bessemer's patent of Feb. 12 last. I shall make no comment, but merely describe the two processes, to show their similarity :—

Capt. Franz Uchatius (patent dated Oct. 1, 1855) says :—"I take pig-iron of the purest quality and melt it in a suitable furnace, and while in a molten state I run the metal into cold water, and thereby reduce it to granulated iron. It is now in a suitable condition to undergo the process which will convert it into cast-steel."

Mr. Bessemer (patent dated Feb. 12, 1856), in describing a modification of his process for preparing iron for conversion into steel, says :—"I proceed, in the first place, to refine the crude iron in the manner hereinbefore described, carrying on the (anti-fuel) process until the most complete refinement is effected, and the iron is as nearly pure as may be. I then pour the fluid iron into water, by which it becomes granulated, and the grains or shots so produced are afterwards to be converted into steel," in the manner described in his patent dated June 18, 1855.

Thus much for the steel. In the letter from Woolwich Arsenal, describing a series of experiments, inserted in your last Journal, it appears that Mr. Bessemer's iron is crystalline, porous, and of a brilliant lustre, and whether hammered, rolled, or fagotted, no better result could be produced. The crystals were simply laminated, and when hammered in the contrary direction their primitive appearance was reproduced. There was no fibre. Now, these statements at least require consideration, and the question which naturally occur is—of what use is Mr. Bessemer's process, if the iron requires puddling even after it has been submitted to it, and this appears to be the fact, before it can be made into saleable bars or anything else? This may be satisfactorily answered, but until it is no great value can be placed upon the supposed discovery.

Another patent, which is at present creating some discussion, as having been discovered to be the first attempt to apply, by mechanical means, air or steam through the mass of metal, is that of Mr. Reuben Plant, of Holly Hall, Dudley (dated Jan. 18, 1850); and although there is sufficient difference between his invention and that of Mr. Martien, to form the subject of a separate patent, the scientific world must undoubtedly give Mr. Plant the honour of being the originator of the system which is now likely to produce such good results, in improving the quality of the pig-iron previous to its introduction into the puddling furnace. Mr. Martien must purify the pigs as much as possible, but not burn the iron by submitting it to too high a temperature; and such being done, Mr. Plant's process of puddling will no doubt make his pigs into malleable iron of first-rate quality, and in the shortest possible time. A MANUFACTURER.

MARTIEN'S NEW IRON-MAKING PROCESS.

SIR,—I stated last week that there were facts, not yet publicly known, respecting the great invention of refining iron, without labour and without fuel, fully as astonishing as all that had yet appeared on the subject; and truly it is so. Little could I dream, when congratulating Mr. Bessemer in the *Times* on this beautiful process, and hoping that he might avoid the shoals and quicksands which have been the eminent misfortune of inventors in iron and steel, that his days were already numbered, and that his glory was departing. In having the full cup dashed away from his lips at the very moment he was touching it, he must, indeed, be classed with the most unfortunate inventors; unless, indeed, he can derive the heathen consolation, that those are most blessed who die young, and are snatched from the scene at once, without the troubles which beset the maturity and term of progressing improvements. In any and every other light he is signally unfortunate.

It appears that Mr. Martien, in Sept., 1855, took out his provisional patent for refining pig-iron, by searching it, when in the fluid state, with streams of air forced under it. After preliminary experiments on a smaller scale, he succeeded in the following November, at one of the largest iron-works in Wales, in performing precisely the same operation from which Mr. Bessemer has been deriving such *eclat*. The only difference being, that the hearth was pierced with 800 blowers, or tuyeres, instead of five. And here I may refer for a moment to a letter of mine, published in your Journal on Aug. 30, in reply to Mr. Avery's notice of the previous week, stating that I could not credit that any man, having his mind possessed with the idea of so great an invention, could have diverted his time and means to a process of such comparatively partial application as the direct conversion of rich ores to malleable iron by de-oxidation. I had no means of knowing, for I had never met Mr. Martien, nor had any communication from him, except an invitation through a third party to examine his plans, and visit the Renton furnace, at Ebbw Vale, that he was confidentially and especially engaged in promoting the interests of others, as well as of himself, in perfecting the Renton process, and felt, therefore, bound in honour to make the perfecting of his own process a secondary consideration, though fully and correctly appreciating its value. I have never met any person so extensively and accurately acquainted with the practical science of the iron manufacture; he is no patent hunter, getting up wares for the public market—his object was not to make a noise with his discovery, but to apply it practically, at the earliest opportunity, to the best proved uses.

But to proceed with the narrative. The refining of liquid cast-iron, without fuel and labour, having been accomplished in THREE MINUTES instead of thirty minutes, by the greater efficacy of 800 blowers in subdividing the air immediately and internally through the fluid iron, and witnessed by a host of incredulous and astonished spectators, in November last, in a hearth which perfectly realised Mr. Adams's "colander," Mr. Bessemer filed, on the 7th of the following month, his provisional specification, very elaborately and historically drawn by Mr. Carpmael, copious in explanations and numerous in inventions. Mr. Martien had not filed his provisional patent through Mr. Carpmael; he must, therefore, be assumed to have been at that time ignorant that his client had been forestalled three months by a very precise specification, which leaves no doubt on the mind of the reader that the inventor was aiming at a precise object, and not casting forth a number of thoughts, with the chance of turning out a prize.

In February, 1856, when the time for filing the complete specification approached, Mr. Martien wishing, as a foreigner, to have the assistance of the most reputed English skill in securing to him in the fullest and safest manner the great discovery he had publicly proved of purifying iron by streams of air without fuel and without labour, employed Mr. Carpmael for that purpose. This certainly was a dilemme for a patent agent. I once knew a case in Chancery, where, to the disgrace of all the solicitors concerned in the suit, there being several parties, one London agent was suffered, for the purpose of cloaking dark deeds, to represent the two country lawyers of two opposing clients.

They managed it by the principal appearing in the Master's office for one client, and his clerk for the other, master and man fighting it out together, to the great edification of decency and justice. And we might suppose in this patent case, that similarly, whilst the principal was attending Mr. Martien, the clerk was attending Mr. Bessemer, were it not for Mr. Carpmael's admission that he himself drew Bessemer's provisional specification, and took great pains with it. Be this as it may, Mr. Martien confidentially disembosomed himself in trust to his agent of the whole of his views on the manufacture of iron, and related his public success under his provisional specification. The avowed object and purpose of provisional protection being to enable an inventor to experiment with safety for six months, in order to have opportunity to enlarge, amplify, and correct as much as possible, in a final specification, the claims sketched out in the first specification, Mr. Martien was very much surprised to find that, according to the English patent law, his brief and comprehensive provisional specification would not cover any claim for refining liquid iron, except while the iron was flowing in a channel or gutter from the blast-furnace, and that he was debarred from refining the iron in a "receptacle," and that it was necessary to strike out of his draft the word "receptacle" wherever he had inserted it. It is true the provisional did not contain the words channel or gutter; it contains no limitation whatever, it claims the searching and complete penetration with air of the liquid metal "as it comes, or after it has flowed from a blast or smelting-furnace, and prior to its congelation in the shape of pigs or otherwise." It was also true that this claim, which Mr. Martien sought the best reputed advice in order to secure, in the amplest manner, had been actually and publicly proved, *not* in a channel or gutter, but in a "receptacle." Puzzled and perplexed by such apparent contradictions, Mr. Martien could do nothing but bow with great unwillingness to English patent law, as expounded by a celebrated agent; he never dreamed, nor could have dared to dream, that there was a secret patent filed under the proper secrecy of six months' protection, being carried forward in the same office, attempting to give another man the title to use Mr. Martien's sole invention in a receptacle or "colander." He puts his life in his adviser's confidential hands, who he could not suspect, and his own final specifications was determinedly, and against every remonstrance, altered into the form in which it is now printed, for every one concerned to read, mark, learn, and inwardly digest.

Now, I do not for a moment doubt the agent's fidelity to Mr. Bessemer; I will give him every credit for endeavouring to his utmost skill to divide the integrity of justice into two equal halves, and give each client a moiety of the truth, but I think Mr Bessemer has grievous ground for complaint.

Mr. Martien is not injured, for it would be merely ridiculous to suppose that the claim of the first specification, supported by public ample proof, can be in the slightest degree affected by the garbling of the subsequent document. He is the sole proprietor of the new method of refining iron; there is no room for five minutes' consideration, much less litigation of the point; but Mr. Bessemer is much aggrieved. When his agent discovered that the main principle of his patent had been forestalled by a prior patentee, it would, of course, have been a sufficient disappointment to have learned that fact; but, unfortunately, relying on his agent's practised skill in the use of language, he has been led on, in the belief that he possessed a claim, to advertise his supposed original invention, at a great expense, all over the country, for Mr. Martien's sole benefit. That sort of public physical disturbance, which the real inventor's acute and philosophical mind had no time for, it being his object and his study not to fill the public ear, but to carry out practically a manufacture which might do him solid credit, and be of real utility, has been excited on a great scale, without the smallest chance of the advertiser reaping any fruit of his labour.

I think this is hard. When patents refer to oil, tallow, and other slippery substances, a certain lubricity of language may be applied with congenial success; but the manufacture of iron is a hard and heavy subject, not easily moved about. Patent agents residing in London can, indeed, be little expected to understand and discriminate which are the weighty practical points in such a manufacture; and I am, therefore, very sorry to see Mr. Bessemer as an amateur iron-maker, and no doubt a very intelligent and deserving person, being entangled into a number of further patents, to endeavour to secure, by a succession of impracticabilities, a matter which has irrevocably gone from him since Sept. 15, 1855.

Sept. 18. DAVID MUSHET.

THE HISTORY OF INVENTIONS.

SIR,—The last of the two excellent articles reprinted in the *Times* from the *Birmingham Journal* concludes with some admirable remarks on the absence of any due records in history of the origin of those gifts of inventors which have been the seeds of civilisation, have incalculably promoted the convenience, the power, and the enjoyments of the human race, brightened the intelligence of succeeding generations, and made nations great and proud. The argument is most aptly illustrated by referring to our total ignorance of the period of that great art, more enduring in its extent and consequences, though probably first performed by accident by some rough hand with unprophetic mind, than all the perished glories of the greatest empires, and their lifeless memorials in pillars and pyramids—the ever-living but simple performance of first plunging heated steel into cold water. Tubal Cain himself, with the spirit of inspiration which magnified intelligence, when the world was young, when men were few, and the ardent spirit took counsel more with Nature than with its fellow-mortals, may have performed that everlasting act; and with some dark and wild prophetic foresight of its future value, he may have thanked God for the discovery, or he may merely, with pompous pride, have thanked his own magnificent abilities, and revelled in mercenary satisfaction at his acquired possession of a great secret of trade. We may conceive this or that, but we have no knowledge. Necessity has been styled the parent of invention; many discoveries, it is on record, have been the child of accident, some even the chance gifts of animals by some fortuitous act, but all our memorials are very few, slight, and trivial respecting the origin, compared with the amount of the body of our useful arts.

During all my life I have been accustomed to hear the regrets of the most intelligent men over this blank but most important page of history; and next after the acute sense of the shameful injustice and ingratitude of leaving the descendants of Henry Cort in neglect and poverty, my exertions in favour of a family which are a national property, and have been treated by the nation in the inverse ratio to its own greatness and their illustrious deserts, have had no greater stimulus than a sense of inexpressible shame that the history of such an invention as the rolling bar-iron should have been well nigh lost altogether in a half century; that in an age which boasts of intelligence beyond all ages of the world, not only the whole body of the people which this invention has blessed, but the high seats of learning—the institutions of philosophy, our profound statesmen, our political economists, who reason so dogmatically on rent, and coats and hats, and commodities, our commissioners of exhibitions of the world's industry,—and if there be any others who ought to know something of the great arts which are the bones, the marrow, and the sinews of the nation's wealth and of their own individual exchequers, add them all in—have been living, as it appears, in as utter ignorance of the origin and progress of the iron trade of this country, which envelopes them in prosperity, as they are of the precise geometrical shape of the atoms of the air which they breathe as it surrounds them.

There is an excuse for ignorance of the latter, for the atoms are invisible and no one knows their form, but the substantial, visible, and palpable material of wrought-iron has been received as a matter of course, with such a dull intelligent thanklessness, day by day, that I have discovered, to my astonishment, in the course of this advocacy, that even legislators of the first water, possessing immense wealth through the manufacture of iron, have been so dark as to be overwhelmed with surprise to hear that there was a period when the processes they use were invented by a human person, and that the puddling and rolling of iron did not come by nature. Do I blame them for this ignorance? Candidly, I cannot say I do. Enormous and astounding as is the amount of ignorance, it yet can be accounted for by simple and commonplace causes constantly in operation, and the moral of the tale is to reflect how easily the complaint of the Birmingham writer may be realised, and how very soon, even in times of high civilisation, aided even by the modern shepherds and watchmen of the press, the flock of inventions may go astray, and their history be as irrecoverably lost in a few tens of years, as the history of the hardening and tempering of steel has been in a few tens of centuries, if some little care and attention be not taken to perpetuate the record. In truth and justice, I ought myself to plead guilty. If accident has been the parent of inventions, so also it has been the means of rescuing their history from oblivion. I have had as much opportunity as most men of intimately knowing the value of Cort's inventions, and I have often casually referred to his unworthy fate; but if accident had not brought me into contact with his surviving son, I should have remained comparatively as ignorant as every one else of the whole merits and demerits. By accident, it was my disposition to have taken great pains in numerous cases to obtain justice for inventive genius; by accident, when the facts of the Cort tragedy were brought before a mind so disposed, I was able to find leisure to search and comprehend the whole case. It has taken me nearly the whole time of a whole year's assiduous and earnest labour to bring the business to its present promising state; and when I look back at the exertion it has required me to rescue, almost at the twelfth hour, the story of Henry Cort from that inexorable hand of Time, "which feeds oblivion with decay of things," I can feel no wonder at all at the general loss of the history of great inventions. That gross injustice has been done I always knew; but it is one thing to know a painful fact, and a different thing to convince others of the importance of your impressions. Every man has his case of grievance, which, being familiar to himself, is more important in his eyes a hundred times, than a hundred times greater case newly introduced to him. In sad truth, injustice, treachery, and ingratitude are so usual, that a tale of the kind falls upon a strange ear like common-place; men hear so much of wrong, that they can bear with philosophy the details of the worst cases of others' suffering. They hear, and pass with pity, the new item of the ills that flesh is heir to. One of the first written applications I made to a very worthy man was met with this reply: "It is truly a sad case, but it would happen every day in the year, were there as many Corts as days." A memorable answer, which, whether its import be exaggerated or not, ought not to be forgotten, and well deserves selection as the motto to a history of inventions. Therefore, now knowing by experience the time and effort required to bring such a case into public recognition, I can well understand the general want of information in the public at large, and even the apathy of the mass of ironmasters, who were too much engaged in the daily emergencies of weighty business to be much disposed to find time to enquire how that weight first came to be laid upon them, remunerative though the burden might be.

It is only step by step that I have gradually realised to myself the full value, direct and contingent, of the discoveries and acts of Henry Cort upon the whole comprehensive circle of our national interests, and this required to be done by some one who had time and perseverance to do it, before it was possible to enlighten the great public on the gigantic arrears which, for 70 years, have been accumulating. England is not an ungrateful country when she knows her benefactors, and in this case she has been unconsciously ungrateful; nor can I dare to exclusively blame an ignorance which, but for a series of accidents, and also with peculiar facilities for information, I should, in a great measure, have shared. That there are persons worthy of blame, deeply and guiltily blameworthy, I have discovered only the too crushing proofs, who knowing the truth concealed it, and continued for the basest mercenary ends, and the meanest jealousy, to stifle and misrepresent all the facts, and deprive the public of the true history; and it is upon these, and upon their memories, that the fault must lie. Those who made Henry Cort die poor, did the utmost that can be done, by "fate or malice, change or time," to keep his name unknown, and kill his reputation as well as his body.

In modern times, the man who makes what is called "his fortune," has already erected his own monument. Watt and Arkwright succeeded in building this memorial for themselves, and, therefore, their names have flourished, whilst the name of Cort, to whom they owed almost all, and who in his fundamental and comprehensive invention held them both in the hollow of his hand, has been barely snatched from the current of time, as it was rapidly nearing the mortal cataract for the last and disappearing plunge. Rescued from Time, "that great-eased monster of ingratitudes," by the *Times*, nothing now remains but to make amends for past shortcomings, and actively repair the breaches of an unavoidable and general ignorance. There are many things to be done besides pecuniary offerings. There is no history of these inventions, so important to every class of society, and to none more than those for whom the benefits of national education are especially proposed, to be found in the best of works sanctioned by the Council of Education. The President of the Council has an especial opportunity of collecting materials for such a necessary work. An ironmaster himself, he is now at Moscow, and can obtain in Russia some singular information respecting the effect upon the iron manufacture of that country; of first the invention, and subsequently the adoption, in their works of Cort's grooved rollers. If the Czar were presented with a copy of the petition to the House of Commons, and our Ambassador with another, they might then compare notes, and Lord Granville would return with some valuable information, pertinent to his interest and his office, as to the rewards comparatively bestowed by barbarous Russia and enlightened Britain, upon those who have promoted the iron manufacture in their respective countries. Lord Ward is also fortunately there, to assist as another ironmaster. He cannot have forgotten the ancestor who first made cast-iron with pit-coal; the recollection will stimulate his enquiries in Russia as to the effects produced by his other countryman, and fellow-craftsman, who first made wrought-iron with the same fuel. This, and much more, is to be done; the Legislature is agitating the establishment of a National Gallery, to accumulate portraits and statues of our national benefactors in science and in the arts, it behoves the promoters quickly to avail themselves of the remaining lineaments of the inventor of the rolling mill and puddling process, as the most wealth-giving of all the inventors who may be united to decorate with their figures the niches of this national temple. The erection, as especially in the charge of the present chief Commissioner of Public Works, will be prosecuted with the ardour of individual as well as public gratitude, for it is to the wealth which his father amassed by the gratuitous use of Henry Cort's inventions that he owes his position in the Government, and in society.

This letter is already so long that I must postpone until next week a few words on the new iron-making process, in reply to correspondents who seem to have "a mission" for snarling, especially that anonymous writer who has discovered a means of putting the latent heat of steam into iron, by the combustion, without decomposing the water, of the gases which constitute it.—*Sept.* 18. DAVID MUSHET.

IMPROVEMENTS IN IRON MANUFACTURE.

SIR,—It is a disagreeable matter to reply to a correspondent like Mr. D. Mushet: apparently his recollection extends only from day to day. The statements in one letter are flatly contradicted by those in another. Proceeding in this reckless manner, he endeavours to saddle me with a few of his blunders, in the clumsy manner displayed in his last letter.

In your Journal of Aug. 30 we have Mr. Mushet writing thus of Mr. Martien's invention and Mr. Bessemer's improvement—"No man with a mind possessed with the great idea of so great a discovery could have been occupying his time in attempting to realise the precarious process of manufacturing malleable iron direct from the ore, first attempted by my late father, 62 years since, and imitated and re-imitated in the interval by countless patentees." And in your last, without a single qualifying remark, he appears as the writer of this passage: "Mr. Truran advances a considerable mistake in supposing that I claimed, for my late father, the invention of that process of iron making still adhered to in countries where wood charcoal abounds, which, previous to the unknown date, some three or four centuries ago, of the invention of the blast smelting furnace, was, it is believed, the sole process in use over the world for making iron from the days of Tubal Cain." Then we have his statement of what he indicated, when, in fact, he indicated nothing more than the reader sees in the first quotation; and a valuable piece of advice that I should make myself acquainted with—the subject on which he writes; but I take it that he meant his peculiar way of turning around and denying his own statements. However, I agree in one point, that men of practical intelligence and experience will appreciate, if they do not understand, his mode of expression. His attempt to clear away his error in pronouncing the combustion of the iron a "transcendent merit" is equally wide of the mark. Mr. W. Wood shows very clearly that in the new process the quantity burnt is excessive; in short, the yield is bad. In Mr. Mushet's opinion, it does not matter that Sir John Guest was the discoverer and patentee of the process of running molten iron into the refinery. It is enough "for small deer," like the writer I suppose, to know that Mr. Hopkins said it was Mr. John Evans who applied it. It is clear that Mr. Mushet is out of his depth altogether, or he would not have blundered in describing Mr. John Evans as Sir John Guest's manager, when the office was filled by another person, Mr. Thomas Evans, at the time in question.

Doubtless many of your readers, equally with myself, would prefer Mr. Mushet pointing out the work wherein the "theory of infusible oxide being blown up in sparks into the air, and descending in the form of molten globules of protoxide," can be found, instead of vaguely hinting at it. The experiments at Woolwich are good so far as they go, but no mention is made of the consumption of fuel, the number of re-heatings to form the bloom, and other data essential to commercial success. We are, indeed, told that the production of the trial piece was accomplished with only five heatings, four hammerings, and one rolling; this surely cannot be an improvement on the old plan. Chemical analysis also is unfavourable. However, we are promised more astonishing results next week.—*Marasion, Sept.* 15. WM. TRURAN.

IMPROVEMENTS IN IRON MANUFACTURE.

SIR,—Having read the provisional specification, and also the specification of Mr. Bessemer's patent, I come to the enquiry, what novelty is there in his invention? I need not tell you, or any of your readers, that to sustain a patent there must be *novelty* in the invention, and the novelty, moreover, must be *beneficial*. The most beneficial invention imaginable, if not new, will not suffice, nor will the greatest novelty conceivable, if unbeneficial, be enough to render a patent valid.

Mr. Bessemer employs air to decarbonise fluid iron. Is there anything new in this? No; it is as old as the hills, and practised wherever a finery fire blazes. All the world knows that at some iron-works the iron is run from the blast-furnace into the refinery in a fluid state, and there exposed to blast, for the express purpose of being decarbonised; and all the world also knows that where the finery is charged with solid pigs, the moment fusion is complete there is fluid iron exposed to blast, with a view to decarbonate it. But Mr. Bessemer employs air in a peculiar mode. Is there anything new in his *mode*? Let us see. He causes the air he uses to *ascend* into the iron, instead of making it *descend*, as in the old refinery. Is this a novelty? No. Mr. Martien "applies air *below* the iron, so that it may *rise up*, and completely search and penetrate every part of the metal before congelation" (see his specification, page 3). He employs "channels or gutters for the iron to run in, so arranged that numerous streams of air may be passed *up through* and amongst the melted metal." The air is made to *rise up*, being forced through the metal in numerous streams; and he suggests other means, besides the perforated gutters, for introducing air *below* the melted iron. It is evident, then, that an up-blast through the fluid iron is no part of Bessemer's invention, for we find it at full length in Martien's specification; and, consequently, if Martien's patent be good, we shall not be very far wide of the mark if we say that Bessemer cannot bring this part of his patent into play without infringing Martien's rights, so that Bessemer is dependent on Martien for his very existence as a patentee. Again, Bessemer employs the air in a furnace. So does every washer-woman when heating her copper. So does the old-fashioned refiner, for the very purpose for which Bessemer employs it—the decarbonisation of iron. Here there is no novelty. Wherein, then, does the novelty of Bessemer's invention consist? Is it in the alternate rising and lowering of two furnaces? or is it in the use of revolving furnaces; or is it in the suspension of fluid iron in a furnace by means of centrifugal force? These contrivances are peculiarly his own, and they are novelties great enough to sustain a hundred patents, provided they are also useful or beneficial, which remains to be seen.

Having shown that there is no novelty in using air to decarbonize, or in an up-blast, or in a furnace, let us see if Bessemer has made of these old things a novel combination sufficient to sustain a patent? I should be free to concede, though there might be two opinions on this point, that if the result of this combination of old materials (one of them, by-the-bye, the up-blast, the property of Mr. Martien) was clearly beneficial there would be *novelty* enough to support the patent. But what is the result? What sort of iron does this combination produce? Is it superior to puddled iron? Is it more marketable than finer's metal, the product of the process it is intended to supersede? Is it malleable iron in the fullest sense of that term, or is it only half, or hardly malleable, just capable of being *coaxed* out under the hammer, *with care*, lest it fall to pieces? Is this the utmost extent of its malleability? And, if so, has Bessemer satisfied both the promise of his specification and also the demands of the patent law, by giving to the public a *beneficial* discovery, as a reward for which a temporary monopoly is secured to him by letters patent?

It is true "big wits" jump together, and therefore it is possible Bessemer may have conceived his invention before he saw Martien's specification; but is more likely he took his ideas from Martien, to which there is no objection, if he has *improvised* a substantial improvement. Time will show whether this be so or not. At present, it appears as if Bessemer stood in need of some one to lick his conception into a workable and marketable shape. Should this be done, and should he get a license from Martien for the use of the up-blast, he will be in a very different position from that in which he stands at this moment.—*Sept.* 15. Q. C.

THE EXPERIMENT IN IRON SHIP-BUILDING.

SIR,—The *Great Eastern* is literally a double ship, there being a space of 2 ft. 9 in. between the internal and external ship all round the vessel. The two sides are connected by plates, with four pieces of angle iron rivetted to them, and then attached as longitudinal framing to the sides of the vessel, which in section represents the letter H. This framing is crossed with angle iron vertically, which represents in section the letter T. The great width of the longitudinal and vertical framing leaves a large space across the plates not supported by framing. A comparison of this vessel's framing with that of the human body will elucidate the argument as to the middle of the plates between the frames being weak. Take, for example, the shoulders and hips to be longitudinal framing, and the waist to be the plates: by placing a pressure on one of the shoulders, with the opposite hand on the ribs, will solve the question whether this fact is not too palpable to be overlooked in so valuable a piece of property as the *Great Eastern*, which, when finished, will cost little short of one million sterling.

The *Great Eastern* will, when launched, no doubt change the ideas and expand the minds of shipowners, and precaution ought to be taken to turn her out as near perfection as possible. There is no doubt in my mind but she will put England and New York within seven days, and *vice versa* six days of each other. There is no difficulty, with capital, of constructing large steamers that will bring Australia, China, &c., within thirty days of England.

Bessemer's wonderful discovery in the manufacture of iron will do great things for the mercantile marine; not taking into calculation what it may do for the old fogies who are folded up in dogmatism, and who infest the "Circumlocution Office," and with all their "how not to do it" dispositions, still allow the "Barnacles" to stick to their sides and bottoms, so as to impede the inventions and improvements that are the life, wealth, honour, and glory of enlightened England. It will not do these days. If the cocked hat, epaulett, sword, &c., fraternity of Great Britain fear travelling by sea at over twelve miles an hour, it does not follow that the traffic of the world is not to be conveyed, and with safety too, at upwards of twenty miles per hour, and by vessels that can be built with an increased strength and internal capacity to the *Great Eastern*. It is quite practicable to attain in these days of *iron wonders* what might in olden times have been regarded as impossible. As for the building wooden vessels for the navy, it is not to be thought of, after what the French floating batteries developed in the Crimea, which were built from designs furnished by myself to the Emperor, and for which I hold his Imperial Majesty's receipt. So I am not speaking off the book. The British Government ratified the same plans at the conclusion of the war as were put before them at the commencement of it, by building at Messrs. Napier and Son's, on the Clyde, Messrs. Samuda Brothers, in the Thames, and Messrs. Palmer Brothers, on the Tyne, floating batteries that would repel shot; and now the inmates of the "Circumlocution Office" want to purloin from me my rights. Such conduct as this is the drawback to improvements in England, and Foreign Governments often get that benefit by which Great Britain ought to profit. As for any silly argument being raised against iron vessels for plugging the shot holes, it can be overcome by mechanical applications, which will surmount what it is not practicable to get over in wooden vessels—viz., splinters, fire from hot shot, dry rot, leakage, &c.

It is practicable to build iron ships strong, free from leakage, and so internally arrange them that they cannot sink, and if they get on rocks they would hold together and save life, and if grounded on a sandy beach would take no injury. I say, without fear of contradiction, that what is utterly impossible with fibrous material is practicable with metal for ship-building, and by which the climax in that art is only

attainable upon scientific and mechanical principles. The *Great Eastern*'s lower masts ought to be so constructed as to give ventilation below decks, and her yards so arranged as to allow the studding sail booms to haul inside of them—*vide* my patent for masts and spars.—21, *Exchange-buildings, Liverpool.* J. CLARE, jun.

THE CYMMER COLLIERY EXPLOSION, AND INQUEST.

SIR,—It appears from the *Mining Journal*, of the 13th inst., that several anonymous letters have been published upon this subject, tending greatly to attach blame to Mr. Mackworth, as having been indirectly concerned in some correspondence relating to Mr. Evans, his successor in the South Wales district as an Inspector of Mines. The letters, signed "Nathan," &c., appear to be in justification of Mr. Evans, and are to the effect that the Cymmer Colliery was not a fiery colliery,—that the rules proposed by Mr. Mackworth were bad,—that those passed by Mr. Evans were good,—and that Mr. Evans had not time to visit the colliery, owing to his recent appointment, &c. Now, Sir, having scrutinised the evidence very closely, and having conferred with persons intimately acquainted with the circumstances, I apprehend the real facts of the case to be as follows:—

1. That Mr. Mackworth had repeatedly pointed out the dangerous and improvident state of the colliery to the owners and agents.

2. That a controversy had arisen regarding the rules being made applicable to a fiery colliery, and that such rules were objected to by Mr. Insole.

3. That Mr. Evans was cognisant of these facts, but neither visited the colliery or consulted with Mr. Mackworth, but passed rules wanting in provisions for a fiery colliery; and he did this, too, when he had no personal knowledge of the state of the colliery.

If these are the facts of the case, as I believe they are, it would appear that Mr. Insole was not justified in alleging that he took no part in the management,—that much credit was due to Mr. Mackworth for exposing the state of the colliery, which has given ample proof that it was fiery,—and that if Mr. Evans was aware of the dispute between Mr. Mackworth and Mr. Insole, and of which he could scarcely have been ignorant, he ought to have satisfied himself of the real state of the mine by inspecting it, or by communicating with Mr. Mackworth on the subject. For the foulness of the pit, the inadequacy of the upcast shaft, and the bad system of ventilation, clearly demanded the use of safety-lamps; instead of which naked lights were used, which ought to have been prohibited by the rules.

It would have been better and more satisfactory to the public if Mr. Mackworth had made a full report to the coroner, comprising all the facts of the case, giving a copy of the rules he proposed, and of those Mr. Evans approved, and which were the rules of the colliery when the explosion occurred. It is, perhaps, not too late for this to be done, as the interests of the public require a fuller and more authentic exposition of all the facts of the case than has yet been made.

The facts divulged at the inquest too fatally prove that a colliery whose atmosphere was so loaded with noxious and dangerous gases, and whose ventilation was so utterly inadequate, ought not to have been worked at all. If the case had occurred in my country, not only would the owner have been implicated by the verdict of the coroner's jury, but very speedily would have been applied to by the reliefs of the sufferers for pecuniary damages.—*Glasgow, Sept.* 15. A SCOTCH VIEWER.

SIR,—I consider that you have given me just cause of complaint for having, in the first place, very unfairly suppressed some of my replies to your correspondents, who have lent themselves, at all hazards, to the task of damaging, if not destroying, Mr. Evans, of Dowlais, in his official position as the Government Inspector of Mines for this district; and, in the second place, after excluded my letters from your columns, for having further availed yourself of your editorial position for the purpose of attacking me, under cover of certain letters, which have appeared in the *Swansea Herald*, and of which you assume from the "style, spirit, and aim," that I am the author. You say that I have "unsuccessfully appeared before the public," in my vindication of Mr. Evans. Perhaps you will have the kindness to inform your readers on what ground you make this assertion, or by what rule you measure the success or otherwise of your correspondents.

If convicting certain writers of publishing in your columns a number of charges false and foul be, in your estimation, a standard of success, then I contend that I have, notwithstanding the suppression of some of my letters, established a case which not only remains unanswered, but which I also boldly affirm to be unanswerable.

Feeling that my proofs against some of your choice correspondents of being guilty of wilful and direct falsehood were altogether unassailable, what is the line of conduct which this trio in union pursue?—why, they have the hardihood to publish a letter in your Journal, in which they triumphantly state that they have discovered the writer of the letters signed "Justice," and then boldly hold out the threat of "imperilling my position."

Such a cowardly threat ought never to have been published in the *Mining Journal*. Nevertheless, having been blazoned before the public, I had every right of reply; but you, Mr. Editor, after having withheld that right from me, now claim the prerogative of officially twitting me with being "unsuccessful." I ask you again, by what rule you measure the standard of success? Is the conviction against my opponents of a series of falsehoods nothing, when weighed in your balances, as compared with their bravado, as published in your Journal, that they have the power to take away my "bread and cheese" "for a' that?" If the want of success can be logically inferred from your suppression of my letters, and your closing the correspondence by publishing a threat to cut off my supplies, why, then, you have established your case. But if that be so, then it follows that henceforth in the columns of the *Mining Journal* the right must yield to the might; and woe be to that correspondent, in the right though he be, should he unfortunately happen to be within the grasp of some of the tyrants, who know how to lord it with a high hand, and fearful effect, within these colliery districts.

Pardon me for telling you, Mr. Editor, that there is something supremely ridiculous in the statement that Mr. Mackworth "has too nice a sense of honour to enter into public discussion." Of course he will not enter into a public discussion with you, so long as you continue to publish your "preposterous laudations" of his "sterling rectitude of purpose, and indefatigable exertion;" and to describe him as "one of the most able and intelligent of the inspectors." No doubt "his nice sense of honour" will prevent him from disputing these points with you. Of course he does not write your leading articles; more especially those which give utterance to the very sentimental expressions just quoted, for that would be rather modest, as well as "nice" and "honourable!" You will, however, allow me to tell Mr. Mackworth that he has not increased the number of his friends, or added to the respect in which he has formerly been held in this district, by silently allowing his name to be mixed up with all the low and vile abuse which has been heaped by your correspondents on the head of his successor, Mr. Evans. His silent consent to the unlimited use of his name in all this tissue of slander, is of itself a virtual endorsement of his approval of the course adopted by Mr. Evans's accusers. While I admit with you that it would be "impolitic and inexpedient" for "a servant of the Crown to enter into a public discussion," I, at the same time, contend, that it is equally "impolitic and inexpedient" for Mr. Mackworth to be a silent looker-on, while his name is being bandied about from pillar to post, and coupled with every slander which his professional friends choose to put forth. The "politic," the "expedient," and, beyond all, the honourable course for that gentleman to pursue (if he can do so consistently with any connection with his professed friends), will be to put his veto on this unscrupulous use of his name; and until he does so, pray, sir, let us hear no more of Mr. Mackworth's "nice sense of honour," &c.—*Llanelly, Sept.* 16. JUSTICE.

["Justice" appears to think that we object to Mr. Evans's appointment, because we entertain a personal feeling against him. This we deny. We protested against his appointment on public grounds only, and because we considered it a gross job. Recent events, and the discussion which has occurred, have not only confirmed our objections to his appointment, but have excited grave doubts as to his competency: these are public and not personal questions, and as such are legitimate subjects for comment and discussion. "Justice" mistakes assertion for proof. When he says, "the Cymmer Colliery was anything but a fiery pit,"—that Mr. Evans's rules were good and Mr. Mackworth's were bad,—he seems to imagine that he has triumphantly and incontrovertably proved it to be so, notwithstanding the whole mass of evidence at the inquest most conclusively proves the contrary. We give this instance merely as a specimen of this writer's mode of dealing with a subject. His correspondence abounds with similar inconclusive and illogical assertions, which it would only be a waste of our space to notice. Such a writer can only injure the cause he advocates. The remarks in his concluding paragraph, in relation to Mr. Mackworth, are equally fatuous. He first charges this gentleman with being a correspondent of ours, and then, on being told that he was not the author of certain articles which appeared in our columns, he turns round and blames Mr. Mackworth for being "a silent looker-on?" Some persons are never satisfied, and "Justice" appears to be one of them.]

PRACTICAL MINE MANAGEMENT.—No. XIII.

SIR,—Having been looking through some of the recent Numbers of the Journal, I have been struck with the forcible observations of, I believe, Capt. Martyn Boundy, for he is evidently a practical "pick and gad" miner; and with those of Mr. Evan Hopkins, who, though no doubt an able engineer and a scientific man, whatever he may know of foreign, has much to learn in home mining. Capt. Boundy most ably supported his position (June 24) regarding the superiority of the labouring, matter-of-fact miner over the "travelling reporter." He appears to be uncontaminated by the united miners—the powers that be; and were the London capitalists to attend to men of that stamp, I believe that for every one failure they will have nine successful adventures. He candidly admits what I have advanced—that when a man possesses a strong interest in mining, although he may not have been brought up to labour with a pick and gad, he will become a good practical miner, after closely connecting himself with the subject, and long watching the operations underground and at grass; but not having performed the work with his own hands, he will be incompetent to set pitches of tribute and tutwork. It is universally known that the late Mr. John Williams was both a great practical and successful miner: he never laboured, nor probably troubled himself to go underground, after he was a boy, when he had rolled the barrow for his father.

I have had no opportunity of seeing Mr. Mallet's observations concerning Mr. E. Hopkins's communication on "Home Mining," other than Mr. Hopkins's reply of June 22; and I agree therewith, that the profit derived from the rich mines (the natives' *bona fide* workings) are not equal to the losses resulting from the working of the unproductive mines by a very large amount, as might be proved by the paid officers of the Museum of Practical Geology, or any other society that commands the means of the required information, and which it would be in vain for a private individual to attempt; for on a scrip mine being "knocked," the monopolists, who remain behind the scenes, immediately obtain a grant *de novo*, and a good price is made of the sett, which soon after appears in your Share List under another name. Wheal Grenville, three or four years ago, was Wheal something else. Wheal Edgcumbe, till last year, when she was knocked, was Treviskey. Twelve months ago I told you Wheal Messer was doing too much. Your columns now have lost it, except it has another name. West Wheal Jewel Consols is North Damsel. Hence it appears that parties are not ignorant of their own iniquities. It is the same system as practised in the days of old Capt. Joe, who may have been employed by the parties to deceive the landowners and the public in the operations of mining, and which are "as plain as the road to church."

Although I have admitted the accuracy of Mr. Hopkins's remark as regards the losses and profits of mining, as an author, I think it necessary to state that one man cannot know everything. A few weeks ago I met with the second edition of his book, to which I merely gave a cursory glance, and so far as I know it may be productive of good in foreign matters, for I have never been out of the kingdom; but in "home mining" I am apprehensive it may lead to serious error. Vulgar errors are always stuck to by scientific men, hence they will have it that London and Paris are on one and the same bed of clay: if it be so, then I verily believe that Rough Tor and Brown Willy, St. Stephen's Beacon, &c., are also on a bed of clay; and by the same test—boring a hole down—any pier of London Bridge may be proved to have been built of clay. Thus, clinging to error, and taking the strata of Redruth and Gwennap upon trust from the interested natives, Mr. Hopkins has published a reduced copy of Mr. Burr's section, from No. VII. of the *Mining Review* of July, 1835, showing the Consolidated Mines to be very rich, with the addition that Old Wheal Damsel and Wheal Clifford, the ground west and east, are poor for copper ores. In its day, Old Wheal Damsel was second to none: it is a shallow mine, and would in depth prove richer than it ever was; but it, like Wheal Jewel and others in that locality, is held in abeyance. And with regard to the present state of Wheal Clifford, your Journal renders it unnecessary for me to trespass further, for it is in 250 shares, at about 400*l.* per share. And as a twin concern, on the same page, Mr. E. Hopkins has published a section of the rich Devon Great Consols, with "poor, hard" ground overlying the adjoining granite westward, with Wheal Emma adjoining, eastward, in a 'mineralised but disseminated" stratum. It may be accurate or otherwise, for I am unacquainted with that district, but I doubt it, because it is so much like the manifesto disseminated through the Falmouth Polytechnic, after the meeting of 1854, which stated that although the Caradon Mines, in the Liskeard district, have been so very rich and productive, yet the St. Cleer Mine, probably immediately adjoining westward, is altogether a barren, or miserably poor mineral stratum, "without any signs of metallic life or value," just similar to what they stated of Tresavean, when they attempted to beat down the late Capt. Teague's project, about 25 years ago.

Having replied with respect to Wheal Grenville, I am reminded of the long-entertained hopes of the adventurers. On Sept. 8 last, the *Mining Journal*, on the authority of a correspondent, described the sett to be most valuable, and which I believe it is, and that it is sufficiently extensive for three good working setts. But of what good is that, except to keep it in abeyance, if not effectually worked, even if it be a monster mine, as extensive as Wheal Trefusis? If worked with a powerful engine effectually, it will soon prove productive and profitable; but I observe, like West Wheal Jewel Consols and Treleigh, it has two pretty little engines, economically worked, for one apparently, on May last, had been long idle, the other was drawing water from a shallow sump shaft to surface, and a cross-cut was being driven through the fast ground, at about 14*l.* or 15*l.* per fm., for which probably 3 or 4 fms. might have been driven on the water vein, if it were necessary for the working, and not inconvenient or prejudicial to the mines in the lower ground. Thus calls may be made and continued till the mine is "knocked," or the grant expired. But should I be mistaken, and the mine become suddenly productive and profitable to the lord and adventurers, it will prove a great inconvenience to the deep old mines, Dolcoath, Cook's Kitchen, and others in that neighbourhood, and quite a case in point to what has been inadvertently admitted will happen further eastward, in the parishes of Redruth and Gwennap, *when* Tresavean, Treskerby, West Damsel, Trefusis, Wheal Cupid, Cathedral, West Wheal Jewel, &c., shall be effectually and productively worked. It is, indeed, time that the lords should themselves take these matters into their own hands, for it has long been said that "None are so deaf as those who will not hear;" and there is none so blind as a miner who will not see. Miners, therefore, "covered over," with impunity, the richest lodes, to the prejudice of the unsuspecting and unwary capitalist.—*Sept.* 8. AN OLD MINER.

THE COST-BOOK SYSTEM, AND THE JOINT-STOCK COMPANIES ACT, 1856.

SIR,—Having carefully perused the letter of "C. H.," in last week's Journal, perhaps you will allow me to ask a few simple questions, in lieu of entering upon a lengthened discussion on the subject. Can any greater penalty be inflicted upon a company for failing to comply with the laws made for its government than rendering each shareholder in it individually liable for all debts contracted by the company, without giving him the opportunity of enforcing any claim against his co-partners? What power have the shareholders in such illegal partnership to compel those in office to furnish an account of their stewardship, whether in the shape of reports upon their operations, or of statements of their receipts and expenditure—if any, under what Act? What law prevents any members of such illegal partnership from contracting debts on their behalf, and thus rendering other partners liable for debts which they never authorised to be contracted? What law compels any person concerned to act upon any resolution passed, or prevents them from acting, although declared incompetent to do so by a resolution, so long as they continue partners in the concern? And what power have the shareholders in such illegal partnership to forfeit shares not paid up, or to compel the payment of calls? The answers to these questions will probably go far to enlighten us on the subject. If they are not satisfactorily solved, no one can donbt but that the position of those who may be thoughtless or reckless enough to embark in an unregistered company is indeed unenviable. I may ask one other question—If the Act did not intend all companies to come under its provisions, why is it made optional whether the company register with or without limited liability?

I am rather surprised that your valuable correspondent, Mr. T. Tapping, whose *Essay on the Cost-book System* is so universally esteemed, remains so silent upon this subject, as I feel convinced much weight would attach itself to his opinion, and he would undoubtedly render himself even more popular than at present with his mining friends and clients by making known his views. MINE ADVENTURER.

Newport, Sept. 18.

MINING SECRETARIES—OFFICES—PLANS AND SECTIONS.

SIR,—Your correspondent in West Cornwall, in last Saturday's Journal, has allowed a mere random assertion of a "Looker-on," on the submersion of South Tamar Mine, to pass current, when a moment's reflection would have satisfied a "Looker-on" that upon a visit to these offices he would find not only copies of all the working sections of the mines for which I act as secretary hanging upon the walls, regularly kept up for inspection by the shareholders, but a vast quantity of plans, dialings, sections, and statements relating to other mines in Cornwall and Devon, during the last half century, for reference as may be required.

I have during 40 years been mostly engaged in mining pursuits, acting at the mines in Cornwall as purser, superintendent, and valuer, and in London as secretary for the last four years; and all those who frequent my office know my business habits, and receive every attention in my power to bestow; they see the working plans, and often have occasion to refer to other documents relating to earlier dates in mining than they can see elsewhere. I cannot, therefore allow such a paragraph as that at page 624, in your last Journal, to go unnoticed. In connection with the occurrence at South Tamar, your correspondent last week states, "That there is not a mining office in the whole metropolis where a correct working plan of any mine is kept." I deny this, and when this letter issues from your office I shall be upon my journey to the mines, the plans with me, to exchange for those hanging up in the account houses of the mines in Cornwall and Devon, that they may as usual be submitted to the shareholders who choose to attend the regular bi-monthly and quarterly meetings held at No. 3, Old Broad-street. This is now I conduct the business of the office, and shall continue to do so. Long practice has proved the necessity, and I adhere to it; in fact, I invite the inspection of those who are in mines under other regulations, seeking for improvement; they shall have my ready assistance.

To conclude, I know South Tamar Mine, and regret its mishap. My advice is, that they first obtain a diving bell from Plymouth, and see the real extent of the irruption, before engaging in either of the schemes so prolifically talked of. I shall in all probability visit this mine prior to my return to London. SAMUEL CARDOZO.

Old Broad-street, Sept. 15.

THE SOUTH TAMAR MINE CATASTROPHE.

SIR,—Having seen a great deal in your Journal about the sad disaster which has befallen this mine, and as, in my opinion, the cause of it has not yet been published, permit me to offer a few remarks on the subject. The probable destruction of the mine has been frequently discussed for several months past—indeed, since the great crush took place in the 60 fm. level, which gave vent at and over the 30 fm. incline (for it is not a level), many of the men have left the mine rather than risk their lives by remaining. It is not long since that a man proclaimed his conviction that the mine would be full of water in less than three months: half the time only had elapsed ere the event followed the prediction. I have myself worked in the mine; and as I had previously held the post of captain in a large lead mine, I considered that I was only doing my duty in pointing out what I knew to be necessary for the security of the mine; but my advice was not acceptable—had it been followed, the mine would have been preserved, and remained in perfect safety.

As much has been said about repairing the breach, before the shareholders go to any expense for that purpose I would suggest that they should institute an enquiry into the quantity of ore discovered, without relying on estimates made by gentlemen who are not practical miners. I would also suggest that it is expedient that an investigation into the cause of the catastrophe should be made, to prevent a similar mishap in the neighbouring mine.—*Beeralston, Sept.* 17. A MINER.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.

SIR,—If the great body of my fellow-shareholders could have been present at the last meeting, and seen and heard what took place, as well as the ludicrous position which your correspondent, Mr. Coombe, assumed, I need not waste my time, nor abuse your space, by referring to the absurd and mischievous observations contained in his letter, published in your last Journal; but inasmuch as only a very small portion of the shareholders were present, and the larger number being consequently unacquainted with what passed, it is therefore possible some may be misled by his garbled statements, though it must, I think, be evident to every reflecting mind that he is writhing under some bitter disappointment, and hence the overflow of his gall. What that disappointment is I am unable to state. Is it that he has such inflated opinions of his own importance as to cherish the huge delusion that among the 1200 shareholders he alone is the fit and proper person, possessing all the capabilities, to fill a chair at the board? Those who are supposed to be judges of his miraculous abilities, unfortunately do not appreciate them. Until I saw his letter I, with many others, was of opinion he was aspiring to that position, but from his epistle it would appear he is not so ambitious; he merely petitions for the office of managing clerk. How any individual having any pretensions to a sense of propriety, after the severe castigation he received at the meeting, could thus boldly rush into print is to me a mystery. The old adage here is again verified, "Fools rush in where angels fear to tread." I have often enquired at the office the reason why Mr. Coombe ceased to be the company's solicitor; as he is fond of explanation, perhaps he will be kind enough, either verbally or epistolary, to enlighten the shareholders. It will be superfluous to follow your eccentric correspondent through the clap-trap parade of the vicissitudes of the company, suffice it to say that it can be nothing new, either to the shareholders or himself; he, at least, must have been fully aware of it during the whole period.

It was stated at the meeting that he was formerly solicitor to the company, and as such pocketed the trifling sum of 3000*l.*; this may probably be the motive for his desire to attempt to wind-up the old company, by means of the Court of Chancery. Does he, vulture-like, smell the carrion, though only "looming in the distance." He may rest assured that neither he or any other lawyer will pocket one single farthing more of the sharehold rs' money than is absolutely necessary. Now, Sir, I am rather a large shareholder, to the amount of something over 2000 shares. I have, as you may suppose, taken some pains to arrive at the real position of the company's affairs; I have had to make many enquiries of the directors, and in justice to those gentlemen, whom your correspondent so glibly endeavours to traduce, I am bound to say that at all times I have found them most ready to afford any information as to the whole affairs of the company: these have been so often and so fully discussed, that it is mere waste of time to recapitulate them here.

I suppose our object is to clearly see our true position, and adopt such steps as would be reasonable to avert our present loss. First, what is our position? Simply that, after an expenditure of some 65,0 0*l.* (much of it, doubtless, needlessly spent) we are not only likely to lose all, but sacrifice a larger sum, unless we support the directors in the new company. From time to time, at the various meetings of the company, the affairs have been fully laid before the shareholders; an appeal was made to them, which was not responded to. Meeting after meeting was convened, but with no results. Several of the shareholders subscribed, many exerted themselves; among these, I believe, your lively correspondent did not appear; the majority of the proprietors thought proper to hold back. What was now to be done? The 85,000*l.*, and the experience obtained by the company's servants, at so much time and cost, was this all to pass away from the shareholders? Yet this must occur, and much more be lost, unless some means be devised to avoid it.

If the shareholders do not assist themselves, and the company should be forced to wind-up, I am informed, from the best authority, that a contribution of from 4*s.* to 5*s.* per share would be required from every shareholder. Some of us waited on the directors, and urged them not to forsake the ship, assuring them that if they would stand by us, and not desert the association, they should have our support in the formation of a new company, based upon the old association; but the directors cannot assist us unless we subscribe our full proportion of shares in the new company, and thereby avoid the Court of Chancery and litigious solicitors, who would make a harvest out of the embarrassed position of the company. I am told that Mr. Coombe has not a large interest in the company. Possibly, professionally he might obtain more should the company be wound-up than his contribution of 5*s.* per share would amount to; but as I am a larger holder, I do not wish to lose what I have already paid, and further contribute to feed a number of legal harpies. Our only hope remains in the stable formation of the new company.

Army and Navy Club, Sept. 18. A HOLDER OF OVER 2000 SHARES.

QUARTZ CRUSHING AND GOLD EXTRACTION—WHICH IS THE BEST MACHINE?

SIR,—In reply to my statement, inserted in your Journal of the 6th inst—that I obtained Her Majesty's royal letters patent, with the great seal affixed, many months prior to June 20—Mr. W. Radley, Ch.E., has had the imprudence to state, in your last Journal, that he is "dumbfounded, as wondering how any man can have the audacity to induce you to print a wilful and intentional falsehood."

Mr. Radley then informs us that he is anxious to find the best machine—"if Mr. Jones has one, let him show it us." As Mr. Radley patented a machine in 1856, his claim, No. 3 in his specification, should convince him (at least) who has the best machine. (See S. T. Jones's specification, dated 1855, No. 1856, with drawing, at the Patent Office.) Therefore, Mr. Radley's libel reverts on his own head.

Now, Sir, I am "dumbfounded" that Mr. Radley should place himself outside the pale of gentlemanly and useful discussion by his defamatory language. I regret this the more, because I give Mr. Radley credit for the industry and mental exertion he displays in his Canon of Criticism, and also for his chemical treatment of ores in his specification. We cannot afford to lose one iota of talent in the free exercise of fair scientific discussion, so much needed to accelerate a perfect system of quartz crushing and gold extraction, auriferous quartz being now found in abundance in the United Kingdom. Mr. Radley can see my sealed patent at my solicitors, Messrs. Nokes and Son, George-yard, Lombard-street. STOFFORD THOMAS JONES.

Circus-street, Greenwich, Sept. 18.

WHICH IS THE BEST MACHINE?

SIR,—It is strange to me that Dr. Collyer should take such an erroneous view of my denunciation of his patent machine for gold quartz treatment, since all that I have said, and you have printed, on my own authority is, that "his machine must prove a failure," like all "roller machines have done." I have not said that his machine *has* proved a failure, in my own experience and knowledge! But I proceeded honourably with the testimony that I received, by saying and writing that a "digger," who arrived from Ballarat in Aug. last, told me that such and such machines (by his description) had proved utterly worthless! I have not seen him since, nor do I *know* his name, but half a dozen other persons were present during the conversation, and were highly gratified and instructed by it; and I distinctly remember now (upon the suggestion of one of those persons) he also said that "the machine *like a garden roller* had been made in the colony," and, if I remember rightly, at the Victoria Foundry, in Melbourne, where, I expect, in the absence of patent protection and common honesty, many patents will be superseded.

I again repeat, that I care not whether Collyer's or any other machine succeeds or not; all I care for is to be able to guide myself and others interested with me in a correct, as opposed to a ruinous, path of procedure.

"Cyanogen" is in error, certainly, when he brands myself and some others (to say nothing of his Jesuitisms in favour of "Mr. Evan Hopkins and a few others") with the use of your Journal to "puff off their inventions," since it is a merit in any man to attempt, by explanation and discussion, to introduce his own or other people's forgotten, neglected, or recently patented inventions to public notice, and therefore to use, more or less beneficially to all parties; and it is the EXCEPTIONAL GLORY OF THE *Mining Journal* to admit and tolerate such lucubrations. Certes, I have not puffed my invention off as yet, nor do I intend to do so, but leave it to to be dealt with *graphically*, after I shall have left this country, and when the specification has been printed, whilst I am *practically* elucidating its real value abroad.

In giving the Canon of Criticism, I have given the *basic facts* upon which this invention rests, for the mechanical part of which I am indebted to my noble wife, the HON. SARAH RADLEY, and have been selfish enough to invite your readers to pull it to pieces for my especial behoof.

In this duty, Messrs. Reay, Collyer, "Cyanogen," and others, have been busy, but certainly have reaped no laurels. Mr. Reay but ill adapts himself to the task, when he instances the agitation of "oil with water," and thence draws an inference which is merely *begging the question*, and the "*long period*" of his peroration is equally inappropriate, as being inapplicable to amalgamation. As to Dr. Collyer's observations and threats, I care nothing also, and am certainly neither *confused* nor *abashed* on my own account. And after your insertion of his accusations against myself, in your last Journal, I can only expect, in common fairness, that you will insert this communication *in full of all replies* and communications with which I shall trouble your Journal while on this side of the Equator, promising to state the facts from that far-off-land as I see or hear them faithfully, whether telling for me or against me.

Hill-street, Peckham, Sept. 16. W. RADLEY, Ch.E., M.D., and L.A.C.

Meetings of Mining Companies.

OLD BOG LEAD MINING COMPANY (WENTNOR, SALOP).

A meeting of the committee and shareholders was held at the offices, Burton-street, Eaton-square, on Sept. 11,—Sir JOHN DORAT in the chair.

Mr. CHENHALL said the meeting was convened to hear the statements of Capt. Barratt, who was in possession of the facts relating to the mine, and read the printed reports.

Capt. BARRATT explained the condition of the mine, and said it was full of water, and had taken two years to fill; that the former company had only searched for lead in the most accessible places, yet they had extracted upwards of 13,000 tons of ore; that it would take a capital of 20,000*l.* for machinery, &c., for the period of two years, at the end of which time the mine would be completely emptied of the water; and, moreover, at the expiration of those two years he (Capt. Barratt) would guarantee to the company at least 1500 tons of ore, and that the lead was worth 2*l.* per ton more than any other in that part of the kingdom, which at the present price would yield a capital equal to the outlay.

In answer to a question by Mr. Salter, Capt. BARRATT further stated that one cause of the abandonment of the mine by the previous company was that other mines had been worked by them, the expenses of which were entirely defrayed by the profits arising from the Old Bog Mine. He would demonstrate that 100,000*l.* had been thus expended. Another cause arose from unforeseen circumstances, which led the principal proprietors to abandon the working, so that a great number of men were thrown out of employment, upwards of 100 of whom are now ready to attest the accuracy of his statement, and could point out the levels in the mine where great quantities of ore are to be found.

Mr. CHENHALL said the mine had not been worked for upwards of 11 years, and he hoped by the end of this month to give Capt. Barratt orders to recommence operations. He also urged those gentlemen present to solicit their friends to join in the enterprise, as the shares would realise a higher price at the commencement of the operations; and if any person doubted the statement of Capt. Barratt, and would accompany him (Mr. Chenhall) to the mine, he would pay him 5*l.* a day whilst there, if the facts were not corroborated. He begged the gentlemen to bear in mind what Capt. Barratt had stated as to the guaranteeing 1500 tons of ore at the end of two years, and this, too, when so much labour must be expended by way of preparation; and if this quantity then, how much may be expected after the specified term? (Hear, hear.) He need not tell them that, according to these statements, they had every encouragement to believe that the present undertaking will prove to be a very remunerative enterprise.

Mr. NEWMAN said he had received a letter from a gentleman who would, no doubt, take 100 shares to commence with, if he could be assured of not being involved in unlimited liability; to which Mr. CHENHALL replied that the mine would be worked on the Cost-book Principle, and, as one of the committee, he would never consent to the incurring of any expenses before the moneys were in the treasurer's or bankers' hands to meet those demands.

The thanks of the meeting were given to Capt. Barratt and the worthy Chairman for their able services, after which the meeting separated, highly gratified with the information received.

OOLA MINING COMPANY.

The quarterly meeting of shareholders was held at the offices, Cannon House, Queen-street, on Wednesday,—Mr. CHARLES SMITH in the chair.

After the usual preliminary proceedings, the following reports were read by the SECRETARY (Mr. Alfred Jeffree), from Capts. C. Crase and J. Pascoe, the agents:—

Sept. 15.—I beg to hand you my report of the prospects of these mines, and the work done since I was appointed your agent. We have driven the adit level west 6 fms. 1 ft., in a promising looking lode, 3 ft. wide, producing occasional stones of good copper ore. This end was suspended by reason of foul air, and for the present I would not recommend your resuming the driving of it, as we have much more important lodes to work upon to the west. The old footway shaft has been cut down and secured for a permanent footway shaft; in cutting down this shaft we broke about 1 ton of lead ore in part of the lode that was standing in the south side of the shaft, about 3 fathoms from surface. I expect this lode will turn out an abundance of mineral in depth, but we cannot do much until the engine is erected. The main engine-shaft has been cut down and secured 10 fms., about 4 fms. more to cut down; the shaft is 10 ft. long and 6 ft. wide; we broke some good stones of lead in squaring this shaft in a lode 6 ft. wide, as fine a lode as can be seen in any mine to the depth. We have drawn the water out with the tackle, and broke to-day from 3 to 4 cwts. of good lead ore from the bottom of the level, on a very fine looking lode. I have cleared away a large space of waste ground around the shaft for buildings, and, as I formerly reported, we cut a very kindly lode, 3 feet wide, about 6 fms. south of the engine-shaft, from which we broke some good stones of lead ore; I have traced this lode about 25 fms. on the back, and broke lead ore in several places; I consider it to be of great value to the mine. While the engine is preparing, I think we had better commence sinking this shaft with a horse-whim. I am fully convinced that a small outlay will bring the mines into a payable and profitable state.

Sept. 15.—I have this day visited the Oola Mine, and have to inform you the only improvement in the mine since my report of March 21 is the discovery of a new lode, about 6 fms. south of the lode Richards's shaft is sunk on, which I think is a great improvement, and your prospects, as I have always said, are good. Captain Crase thinks an engine will be shortly on the spot, which would be very requisite for the speedy prosecution of the mine; but should not the engine be ready, I think the shaft could be sunk 10 fms. deeper with a horse whim and barrels, but would not be complete before March, 1857. A horse whim must be put up at once should an engine be erected, and it must be borne in mind that the winter is fast approaching. I should also advise the building of a house or two on the mine, as there is no shelter for man or beast, and plenty of materials on the spot. Capt. Crase has now a ton of lead ore at surface, broken from the south side of the footway shaft. Should the mine be vigorously prosecuted, I think it would be soon placed in the Dividend List.

Mr. GLANVILLE, in moving the adoption of the report, stated he thought that an auditor should be appointed; this, he considered, would be more satisfactory to the shareholders.

Mr. CHANDLER remarked that, so soon as the committee were paid, they would be enabled to recompense their auditor.

The accounts were then read, which showed—Calls received, 308*l.* 10*s.*; purchase

of wheel, 100*l.*; sale of 200 forfeited shares, 50*l.*=458*l.* 10s.—Balance from last account, 231*l.* 11s. 3d.; cost and merchants' bills, June, July, and Aug., 143*l.* 13s. 8d.; secretary's salary, pumping gear, &c., 77*l.* 7s. 10d.: leaving balance in favour of mine, 5*l.* 17s. 3d. The balance of assets over liabilities was 75*l.* 1s. 9d.

Mr. WILSON stated that it appeared to him the accounts were as favourable as they could expect; it would be necessary, however, that they should have a call. If they were to go on with the working of the mine, they must do so energetically; and he would advise the committee to make a sufficient call to meet contingent and necessary expenses.—The accounts were then passed.

Mr. CHANDLER enquired what would be the expense of the necessary buildings? In his opinion, the call they should decide upon ought to be sufficient to cover any necessary outlay.

The CHAIRMAN observed that he held a great number of shares; he believed they had a good mine, he was largely interested; and his opinion was, the call they should agree upon ought to be such as to preclude them coming to the shareholders for some time.—Mr. GLANVILLE stated, that in about two months the engine would be shipped. There would be required to be erected some necessary buildings, and when these were completed, the engine put to work, and shaft sunk to a proper depth, he had no doubt the mine would be in a paying state.

After some discussion, it was decided that a call of 3s. 6d. per share should be made, and a special meeting held on the 30th inst. to forfeit the shares of defaulters in arrear of calls, as well as to appoint an auditor. It was resolved Mr. Glanville should proceed to the mine as early as possible, in order to decide where the necessary buildings were to be erected. The following gentlemen were then appointed a committee of management for the ensuing three months:—Messrs. Glanville, R. S. Palmer, A. Gossett, T. Chandler, and C. Smith. A vote of thanks was given to the Chairman, and the proceedings terminated.

FOREIGN MINES.

The Alten Mining Association have their report, from Aug. 4 to 27:—

RAIPAS: In the roof stope in the 20 the lode is somewhat smaller than when last reported, but the ore continues equally rich and solid. In the cross-cut near shaft No. 2, a great improvement has taken place in the lode, and the prospects are flattering; but having no wall as yet as a guide, we are still unable to judge of the value of this discovery. The stope in the 10 has slightly improved, though not so much as we anticipated. In other parts of the mine there is no change.—OLD MINE: The lode in the eastern stopes continues regular in size, yielding in places 3 tons of ore per fm.; but the ore being disseminated so irregularly proves rather disadvantageous in stoping, as much of the poor ground is taken away with the good; therefore, in order to obviate this, we contemplate suspending most of the tutwork and set it on tribute, which, under present circumstances, will enable us to return the ore at a less cost per ton. The lode in the tramroad level is about 2½ feet wide, composed chiefly of calcareous spar, mundic, and stones of ore. The ground in the winze is rather more favourable; the lode is still full 7 ft. wide, and on the footwall part yields some good stones of ore. The lode in the shallow level is still about 4 feet wide, and looks much as before.—UNITED MINES: The lode in the 50 is about 1½ foot wide, yielding full ½ ton of ore per fm.; but our progress here is rather slow, owing to the air being so foul. However, we have commenced a winze in the 40, and as soon as it is holed we shall be able to develop this part of the mine more rapidly.—MICHELL'S: The prospects in the pitches continue much the same, and we expect the produce for this month will be about the same as last.

The Lusitanian Mining Company have received a report of the Palhal and Carvalhal Mines, from Capt. T. Chegwin, to Sept. 6:—

PALHAL: The ground in Taylor's engine-shaft, sinking below the 18, is without alteration to notice. The lode in the 18, driving east of Taylor's engine-shaft, is 4 ft. wide, 1 ft. of which is copper ore, worth 2 tons per fathom. The lode in the 18, driving west of the same shaft, is 1½ ft. wide, has rather improved, and is now worth 1 ton per fm. The lode in the stopes No. 1, west of Taylor's, in the back of the 8, is 2 ft. wide, worth 2 tons per fm. The lode in the stopes No. 2, west of Roye's winze, is 1¼ ft. wide, worth 1½ ton per fathom. The lode in the stopes No. 3, east of Taylor's engine-shaft, is 3 feet wide, worth 2½ tons per fm.; this stope is suspended for the present, it being near the shaft. The lode in the stopes No. 4, east of Marque's rise, is 15 in. wide, worth 2 tons per fm. The lode in the stopes No. 5, in the back of the 18, east of Taylor's engine-shaft, is 3 ft. wide, worth 2 tons per fm. The lode in the winze sinking below the 8, east of Taylor's, is 1 ft. wide, composed of killas. The lode in the stopes in the bottom of the adit, on the Mill lode, is 8 in. wide, worth 1 ton per fm. The ground in the cross-cut, driving north towards Lowndes' shaft, from the adit level in the eastern hill has improved; we think the communication will be made to the shaft next week. The lode in the adit level, driving east of the river Caima, on the north lode, is without alteration. The ground at Oak shaft, sinking below the adit, is of the same character as it has been for some time past, but the water is on the increase.—CARVALHAL: The lode in the deep adit, driving east of the river Caima, on the C lode, is 1¼ ft. wide, composed of quartz. The lode in the top adit, driving east on the G lode, is 1½ ft. wide, composed of mundic and quartz, with carbonate of copper. In this level we have driven through a cross-course 6 ft. wide, but it has not hove the lode out of its regular direction, and there is now a large stream of water issuing from it. We have continued our tracing of the C lode, and have found a small branch down near the river, on which we are opening a little to see what it is. We have weighed and sampled Aug. ore 58 tons 19 cwts., which will be carted off as quickly as possible.

La Fortuna Mining Company have advices from Linares to Sept. 9:—

CANADA INCOSA: West of engine-shaft, the fifth level, east of Las Ancoras winze, has been driven in Aug. 2 fms., and is re-set to drive by four men, at 600 reals per vara; the lode is at present without lead. The fifth level, west of San Enrique winze, has been lengthened 1 fm. 3 feet 7 in., and is re-set to drive by four men, at 600 reals per vara: the lode is at present unproductive. The fourth level, west of Eugenio's winze, has been extended in August 1 fm. 2 feet 9 in., and is re-set to drive by four men, at 550 reals per vara; the lode contains spots of lead, not to value. The lode in Casualidad winze, coming down before this level, is large and unproductive, so that I look forward to a change for the better in this end before long. Casualidad winze has been deepened in the past month 2 fms. 3 feet 4 in., and is re-set to sink by four men, at 400 reals per vara; the lode is large, and worth from 2 to to 2½ tons of lead ore per fathom. O'Shea's shaft, under the third level, has been deepened in August 1 fm. 5 feet 1 in., and is re-set to sink by four men, at 800 reals per vara. We have been drawing out the water from Kendall's winze, under the third level, east of O'Shea's, and are down about 8 fms. The workings are very extensive, and the lode, as far as we have seen, taken away for a great length; we hope to find some good ground under the fourth level at this point. We have two stopes working on this lode under the fifth level, east and west of El Clavel, where the lode is good. We intend to continue as quickly as we can with the cutting down of Purgatorio winze, to make it a continuation of Taylor's engine and whim shafts to the fifth level, and drive east to get under the ore ground driven through in the fourth level.—East of engine-shaft: The fourth level, east of Buena Ventura winze, has been driven during the past month 1 fm. 3 feet 8 in., and is re-set to drive, by four men, at 600 reals per vara: the lode is divided into branches, composed of calcareous spar, lead, and granite, worth ½ ton of lead ore per fathom. Fortuna winze, a little in advance of the fourth level, and sinking under the third, has been sunk in Aug. 1 fm. 0 feet 5 in., and is re-set to four men, at 650 reals per vara; the lode at present is unproductive. The third level, driving west from Terrel's winze, and the third level driving east from Chacon's winze, have been holed since last report, with a difference of 3 feet in the level; to complete this work the bottom will be stoped, and the water allowed a free run. The third level, east of Noman's winze, has been lengthened in Aug. 1 fm. 1 ft. 10 in., and is re-set, to drive by four men, at 700 reals per vara; the lode is worth 1 ton of lead ore per fathom. We are cutting down the eastern end of Terrel's winze, in order to connect it with Henderson's shaft, which work will not be very long nor expensive, and by this means we shall secure the continuity of Henderson's shaft to the third level, and work with increased facility.—LOS SALIDOS MINE: I am glad to advise you of the communication being made with the second level by the cross-cut driven from he engine-shaft, the total length of the cross-cut being 6 varas. The engine-shaft has also been divided to the second level, and the whim at work on it. We expect to commence clearing the level in a day or two. Morris's whim-shaft has been sunk in August 1 fm. 3 feet 9 in., and is suspended sinking until we let down the water by a cross-cut from the lode, when we shall sink it with much less expense. The stopes continue productive, and I trust our next report will give you some additional information about the state of the second level eastward.—H. THOMAS.

The Linares Mining Company have advices from Pozo Ancho to Sept. 8:

—West of engine-shaft: The 65 fm. level, west of Don Carlos's winze, on the south part of the lode, was driven last month 2 fms. 0 ft. 10 in., and is re-set to drive by four men, at 400 reals per vara, and ½ real per arroba for lead ore; in this end there is a very promising lode, and likely to improve, worth at present 1 ton of lead ore per fm. The 65, in the north part, west of Don Carlos's winze, has been extended during the past month 1 fm. 3 ft. 5 in., and is re-set to drive by four men, at 450 reals per vara, and ½ real per arroba for lead ore; the lode is worth 1½ ton of lead ore per fm. Richards's winze, sinking under the 55, west of Don Carlos's winze 18 fms., sunk last month 5 ft. 6 in., and is re-set to sink by six men, at 260 reals per vara, and 1 real per arroba for lead ore; the lode is worth 4 tons of lead ore per fm.—East of engine-shaft, on south lode: The 75, east of Manuel's winze, is set to drive by four men for the month, at 450 reals per vara, and ½ real per arroba for lead ore; in this end there is a large promising lode, containing stones of ore, but not to value. The 65, east of Miguel's winze, has been driven in the past month 1 fm. 1 ft., and is re-set to drive by four men, at 500 reals per vara, and 1 real per arroba for lead ore; the lode is worth about 1 ton of lead ore per fathom. Juan's winze, sinking under the 65 fm. level, 10 fms. east of Shaw's shaft, was deepened during part of last month 2 ft. 7 in.; re-set to sink by six men, at 500 reals per vara, and 1 real per arroba for lead ore; lode worth 1½ ton of lead ore per fm. In the 55, east of San Pedro's winze, the cross-cut north has been extended in August 1 fm. 4 ft. 7 in.; re-set to drive by four men, at 550 reals per vara for 2 varas, and ½ real per arroba for lead ore. There is nothing new in the cross-cut since last report, but we expect soon to intersect the north lode. In the 31, east of Taylor's shaft, the cross-cut north has been driven in the past month 1 fm.; in this cross-cut we have lately cut through a branch, or lode, 1 ft. wide, worth ¾ ton of lead ore per fathom; we have set to drive 1 vara, at 300 reals per vara. The 20, east of No. 3 winze, has been extended during the past month 2 fms. 0 ft. 2 in., and is re-set to drive by four men, at 350 reals per vara, and ½ real per arroba for lead; there is a large lode in this end, but poor at present.—East of engine-shaft, on middle lode: The 45, east of Taylor's cross-cut, has been driven in the past month 1 fm. 2 ft. 7 in.; re-set to drive by four men, at 450 reals per vara, and ½ real per arroba for lead ore; lode worth 1 ton of lead ore per fm.—East of engine-shaft, on north lode: The 55, west of Thorne's cross-cut, was driven in August 1 fm. 4 ft.; re set to drive by four men, at 450 reals per vara, and ½ real per arroba for lead ore; lode worth 1 ton of lead ore per fm. The 55, east of Gea's winze, on the north part of the lode, has been extended during the past month 1 fm. 5 ft. 6 in.; re-set to drive by four men, at 400 reals per vara, and ½ real per arroba for lead ore; lode worth 1½ ton of lead ore per fathom. The 55, east of Cristobal's winze, on the south part, has been extended in Aug. 2 fms. 4 ft.; re-set to drive by four men, at 400 reals per vara, and ½ real per arroba for lead ore; in this end the lode is 5 ft. wide, composed chiefly of calcareous spar and lead ore, a very promising lode, worth 2 tons of lead ore per fathom at present. Cristobal's winze is communicated to the 55 fathom level, on the south part of the lode. Taylor's shaft, sinking under the 45 fathom level, has been deepened during the past month 2 fms. 1 ft. 10 in.; re-set to sink by eight men, at 600 reals per vara, and ½ real per arroba for lead ore; the lode is worth 6 tons of lead ore per fm. The 45, east of Puerta's winze, on the south part, was driven last month 1 fm. 4 ft. 4 in.; re-set to drive by four men, at 450 reals per vara, and ½ real per arroba for lead ore; the lode is worth 1 ton of lead ore per fm. The 45, east of junction, on the north part, has been extended in August 6 fms. 5 ft. 2 in.; re-set to drive by four men, at 200 reals per vara, for 10 varas, and ½ real per arroba for lead ore; the lode is worth 2½ tons of lead ore per fm. The cross-cut in the 31, east of Puerta's winze, driving north, has been extended in the past month 1 fm. 5 ft.; re-set to drive by four men, at 450 reals per vara, for 2 varas; nothing new in the cross-cut since last reported. Morano's winze, sinking under the 31, east of Puerta's winze, was sunk last month 1 fm. 5 ft. 6 in.; re-set to sink by four men, at 450 reals per vara, and ½ real per arroba for lead ore; the lode is worth ½ ton of lead ore per fathom. The winze under the 20, west of Field's shaft, was sunk in August 1 fm. 5 ft. 6 in.; re-set to sink by four men, at 500 reals per vara, and ½ real per arroba for lead ore; the lode is not productive at this point. Warne's shaft, sinking under the 20, was deepened in August 2 fms.; re-set to sink by six men, at 800 reals per vara, and ½ real per arroba for lead ore; at this shaft there is a large promising lode, producing good stones of ore. The cross-cut south from Crosby's shaft has been extended in the past month 3 fms. 1 ft. 10 in.; re-set to drive by four men, at 300 reals per vara, for 4 varas; up to this time we have met with nothing worthy of notice. The 15, east of air shaft, has been extended in the past month 1 fm. 1 ft. 4 in.; re-set to drive by two men, at 350 reals per vara, for the month, and 1 real per arroba for lead ore; the lode is unproductive. We have fixed our 8-in. plunger-lift in the 75, and drained the water to the 85, and we are clearing the stuff from the different tutwork and tribute bargains, to resume working them as soon as possible. The crank for the steam-whim has arrived on the mine, and we hope to get it all right to set the whim to work in the morning.

The Pontgibaud Mining Company have received advices from Captain Rickard, from which the following are extracts:—

PRANAL: The 50 metre level, south of the long winze on the Armand lode, is about 3 feet wide, of a promising character, and yielding some saving work. The No. 1 stope on the Armand lode, in the back of the 50, south of the junction, is yielding 12 ewts. of ore per fm. No. 2 stope south, in back of the 50, is yielding 15 cwts. of ore per fm. No. 3 stope is producing 1 ton of ore per fm. No. 4 stope, north of the long rise, is producing 2 tons of ore per fm. We have three tribute pitches in this mine about the adit level, two at 100 frs., and one at 75 frs. per ton of ore, 50 per cent. for lead.—BARBECOT: The 35 metre level north is looking more promising than it has for some time past, and is approaching the run of ore ground gone down in the bottom of the 20 metre level. We have now working in this mine 10 tribute pitches, varying from 99 frs. to 150 frs. per ton of ore, 50 per cent. for lead; the ore they break is rich in silver, therefore it leaves a good profit to the adventurers.—BROT: We have now working in this mine three tribute pitches, at 100 frs. per ton of ore, 50 per cent. for lead.—MIOCHE: Taylor's engine-shaft is sinking rapidly by eight men, and without a change in the ground; two months after this will complete it to the 40. The water is very little, and no lift required for sinking. The 10 metre level, south of the winze, on No. 6 lode, is producing 1 ton of ore per fm.; the same level north of winze is producing 1½ ton of ore per fm.; each of these ends are looking kindly. No. 1 stope in back of the 20 metre level, on No. 3 lode, is producing 1 ton of ore per fm. No. 1 stope in the back of the adit, on No. 6 lode, is turning out 1½ ton of ore per fm.—ROSIER: The sinking of John's engine-shaft is begun in good earnest by nine men. The 25 metre level, north of John's shaft, is producing ½ ton of ore per fm. No. 4 stope, south of St. Joseph's shaft in the 85, is worth 1 ton of ore per fm. We have working in this mine 10 tribute pitches, varying from 75 frs. to 140 frs. per ton of ore, 50 per cent. for lead.—ROURE: The 20 metre level, north of St. Peter's shaft, is still in ore ground, yielding 1 ton of ore per fm. The lode in the stollen, south of Agnes' shaft, is still looking kindly, and producing ½ ton of ore per fm. No. 1 stope in the back of the deep adit, on Emelie's lode, is turning out 3 tons of ore per fm. No. 2 stope, in back of the 20, is turning out 4 tons of ore per fm. No. 1 stope, in back of the deep adit, is turning out 3 tons of ore per fm. We have 24 tribute pitches, working at an average tribute of 85 frs. per ton of ore, 50 per cent. for lead. We have a full supply of labourers for every department. The last two or three days we have had a good supply of water, and I am glad to say everything in the mines is going on well.

The United Mexican Mining Association have advices from Major Farrell, R.A., dated Guanaxuato, Aug. 15, from which the following are extracts:—JESUS MARIA Y JOSE: I am happy to inform you that the new shaft reached its destined point on the 1st inst. On the 5th inst. I went down, accompanied by the administrador, passing from it to the lower workings at once, and without difficulty. During the past week, by incessant work, 10 varas have been carried below the point above referred to, to serve as a reservoir for any water that may collect; the total depth, therefore, is now 232½ varas. The accumulation of tepetate (rubbish) is coming up direct from the level of San Juan; when this operation is concluded, it will then remain to extract the water which has accumulated in the pozos of San Hilario, San Francisco, and Dolores, the latter being close to the bottom of the shaft. The operations here specified will occupy us to the close of the month, when the extraction of ore will commence from six labores, or points, of the mine. It is but justice to the administrador, Mr. Villagran, to say, that to his unremitting zeal and exertions the early completion of the shaft is mainly attributable, and that in point of economy and execution it may vie with any in the district.—LA TRINIDAD: Nothing to add to the last report.—ALDANA: This mine offers nothing fresh to report upon.

The Royal Santiago Mining Company have advices from Cobre, dated Aug. 8 and 15:—The alteration that has taken place in the mines since I last wrote consists in an improvement in the 44 fm. level west. This level Capt. Simmons reports to-day (Aug. 8) as looking much better. In cutting a pitch in the north wall a stream of water has been cut; Capt. Simmons is of opinion that it is coming from a lode further north than our present one. There is also an improvement in our 56 west; the lode contains more ore than last reported. The weather is very dry, and the heat intense; the precipitate works are suffering much from it. We have commenced to drive a cross-cut north from the 32 end west, to intersect the part of the lode which was left standing when we stopped stoping in this level.—The advices dated Aug. 15 state: The rise in the back of the 32 is communicated to the 22, and the air is much better in the 32 end west. We have suspended driving the 32 end west for a few days, and commenced driving north, to ascertain if the north part is richer than the south. We are stoping the bottom of this level; the lode is from 3 to 4 ft. wide, producing 3 to 4 tons of copper ore per fm. In the 44 end, driving west, the lode is from 8 to 9 ft. wide, producing 3 tons of copper ore per fm. A lode has come in from the south and formed a junction with this one, which is a very poor junction indeed, as far as we have yet seen—a very large lode, composed of spar and spots of copper ore. It is generally the case when two lodes fall together in this way that they make a large bunch of ore. In cutting a hole for a piece of timber in the north side of this end we have cut a stream of water, which we think comes from a north lode, but we shall not be able to do anything in driving north yet, as the air is very bad. The 44 fm. level, east of cross-cut, is poor. The stope in the back of the 44 fm. level is producing about 4 tons of copper ore per fathom. The 44 end, driving west from our eastern cross-cut, is yielding 1 ton of copper ore per fm.; this end we shall communicate in a few days with our 44, east of cross-cut. In the 56, driving west of Taylor's, the lode is about 3 ft. wide, producing 2 tons of copper ore per fm. The 56, driving towards Thompson's, is very hard and compact for driving. We have resumed the driving of the 62, west of Taylor's; the lode is from 2 to 3 ft. wide, producing 1 ton of copper ore per fm. We had the 70 fm. level dry for a few days, and commenced to clean out the ends; but we have had a breakage with Taylor's bob and connection rod, and the water is in again. Thompson's engine-shaft is hard and compact for sinking. Isabella shaft, sinking below the deep adit level, is hard and compact for sinking; we are getting on a little faster in sinking this shaft since we have put our own negroes to do it. In the 10 fathom level cross-cut, driving towards this shaft, the ground is favourable for driving. We are getting on pretty well towards the bottom of St. Andrew Scott's shaft. In the 12 fm. level, driving west from this shaft, the lode is large, composed of spar, clay, and occasionally good stones of ore. Reunion shaft is getting much harder for sinking; this shaft at present is composed of clay, spar, and a great deal of mundic.

The Wildberg Great Consolidated Mining Company have their report, dated Sept. 12:—"I am most happy to inform the council that the eastern and western mines are united by the level going west from the bottom of the Turken sink, and the deep level coming east with the Feldort. This was completed on yesterday morning, and we have now abundance of good air, and shall commence to drain out the water from Beck's sink forthwith, and soon resume working on the rich courses of silver-lead ore in that part of the mine. In order to bring away the attle and the ore speedily and cheaply, we are laying down a new railroad, which I am glad to say is progressing well, and I hope will be completed in the course of 9 or 10 days. In Carter's shaft the men have completed the work on which they were engaged when I wrote my last report, and we are now waiting for the pipes which are ordered by Mr. Dean for forking out the water from the old men's workings. As soon as these pipes arrive, which I hope will be to-morrow, the work in this shaft will be pushed on as quickly as possible to get at the course of ore left by the old men. The stopes on the Gottes Hulfe continue good, and are worth 2½ tons of silver-lead ore per fm., but the ends are unproductive at present. The end driving west from the bottom of No. 1 sink in the Umbruchs level is opening good ore ground. We commenced in the past week to stope the back of this level, which is worth 3½ tons per fm. But I am sorry to say that we are obliged to suspend this work again for want of air, but this will soon be removed by a communication from No. 2 sink to the No. 1: we shall then be able to stope to a good advantage, and resume the sinking of No. 1, which is worth in the present bottoms 4 tons of silver-lead ore per fm. The stopes at No. 3 continue good, and are worth 3 tons per fm. In No. 4 sink the ground is hard and spare for sinking, but the lode is good, worth full 4 tons per fm. No. 5 is progressing well, and the lode will produce 4½ tons per fm. The middle level driving east from the Turken sink is proceeding well, and has just passed through a good shoot of silver-lead ore, which we shall commence to stope as soon as the end gets a little further forward. We have commenced to stope the back of this level. West of the sink the lode is turning out well, worth 3 tons per fm. The stopes at the Neuer Dorn shaft and the different workings throughout the mine are just the same as last reported. At surface the catch pits are completed on the new dressing floors, and we shall get some more jigging machinery to work forthwith."

The Fort Bowen Gold and Silver Mining Company have advices from their manager, dated Aug. 18, of which the following is an extract:—"We have continued sinking the shaft, and now we have attained the depth of 60 ft. 8 in. from the surface, which is 30 ft. deeper than our former level; this is now as deep as I intended to sink, and shall, as soon as the bottom of the shaft is secured, which will be the work of a few days, commence to drive east and west on the lode. I believe the lode in the bottom, when cut through, will be found as large as in the level above, but of course there is not so much gossan as you go down. My object has not been mere produce, but to obtain the depth in the shaft to see if the lode continues down, that it might be worked extensively when the time comes to work the machinery now on its way to the mines. Captain Paul's arrival afforded me great pleasure, and I am of the board's opinion he will prove an able and valuable agent, for all we want is practise and activity combined. The two days he has been here we have employed ourselves in going over the works both at surface and underground. I have made him acquainted with my views, and pointed out the site for the erection of the machinery, —that is, for the moment—Medwin and Hall's engine with 12 heads of stamps, and the water-wheel with 18, and the sites for taking up the many rivulets of water to work with until we can reach the Rio Guibal, and it is satisfactory to say he agrees with me in every particular."

The Nouveau Monde Company have received their monthly mining report from their superintendent, Mr. Richard Bray, dated Alotepeque, July 30:—"SAN PANTALEON MINE: Cornubia shaft has been sunk 4½ varas, and is now 7½ varas below Dolores level. I expected we should have had the lode in it by this time, but am disappointed. It has become nearly vertical, as it frequently does; if after attaining the depth of 11 varas it be not cut, I shall drive a small cross-cut north to examine it. I have observed in the old workings that when the lode becomes vertical it makes ore. The water in the shaft has very much increased owing to the excessive rains; it is almost impossible to take up all the surface water, which filters through the attle in the old workings, which are in several places continued to the surface. We are now laying launders in the bottom of Dolores level to take it up as well as we can, and which will, I doubt not, have the effect of diminishing to a great extent the water in the shaft.—San Damasio Level: Owing to the scarcity of powder we have driven only 1¾ vara on the branch east, mentioned in my last, and which presents no new features.—Dolores Level: 4½ varas have been driven east on the lode in hard ground; this has now become much more favourable, and can be driven without powder. The lode has varied in width from 1 to 2 ft., the branch of ore producing from 1½ to 2 tons per fm. This ore is by no means so rich as that we have hitherto extracted in driving this level, being composed principally of sulphuret of zinc, carrying spots of the rich class of ore before mentioned; the zinc ore assays 65 ozs. silver per ton. The lode is now 1½ ft. wide, without any solid branch of ore, but all good saving work. We are now in close proximity to the intersecting lode observed in the level above, and I am daily expecting to meet with it; before next mail we shall doubtless have cut through it. By next mail I hope also to be able to give you some information of the value of the lode under the present level, as I hope to commence sinking winzes on it in a week, as well as a rise from the present end of Dolores level to the level above (14 varas).—EL SONOCCO MINE: The second level has been driven 6½ varas without any improvement, and I have suspended it. Two men have been stoping along the back of this level, but the ore had not held up, although we have it in the bottom of level No. 1. All work has been suspended in this mine until the dry season, when we shall be able to extract the ore in level No. 1, which is the best we have yet had. To attempt to do so now would be dangerous.—EL CRISTO: Two men have been engaged in cleaning out an old working to the eastward; they cleared 7 varas in a week, and reached the end. The branch of ore in the bottom of this level (which is 18 varas above our eastern level) is 7 in. wide, composed of galena, zinc, and copper. I doubt not we shall be able to continue working this mine soon, as I am in expectation of a supply of powder.—Dressing floors: We are now making arrangements to finish laying out the floors at San Pantaleon Mine, so as to commence dressing the small ore now extracting as well as what we have in hand; the rough ore can be only partially dressed until the erection of the stamps, the ground for which is now being laid open. We shall finish dressing the ores at at El Sorroco this week, and shall have 16 tons, more or less.—Reduction Works: The furnace has been commenced, the iron work for it is nearly finished, and we have burnt another kiln of brick, which will perhaps suffice to finish it; we shall, however, continue making."

The Australian Mining Company have advices from their agent, Mr. Forster, dated Charlton, June 18. He was engaged in sinking on the Leasehold Section, and in the old shaft and winze No. 5. He writes that in driving south-west from the latter point he was meeting with great balls of blue and green carbonate, and of much more frequent occurrence than before. "The same may be said," he adds, "as regards our driving on the course of the lode south-south-east. Both these drivings are going to a hill, in some part of which, I think, a powerful lode exists. The ground is a beautiful white killas. Either by our present level, or by means of the whim shaft, the indications are such as to hold out great promise of one or other making great discoveries. By the first opportunity I will send you a box of specimens, as also the ore we have dressed (about 25 cwts.) from mineral lease No. 3524."

The Clarendon Consolidated Mining Company of Jamaica have advices to Aug. 26:—At Stamford Hill, the lode in the stopes in the bottom of the 22 continues about 9 ft. wide, composed of spar, flookan, iron, and yellow and variegated copper ore. The lode in the 35, north-east of shaft, is now about 6 ft. wide, presenting a favourable appearance. The Wheal Jamaica Company is progressing very satisfactorily. The stopes throughout are yielding some first class ore, and it is highly probable that, in the course of a few months, the company will be enabled to make another considerable shipment. In the 50 the ground continues to improve: an assay of a stone of ore had produced 30 per cent. of pure metallic copper. The *Whistling Wind* arrived at Liverpool on Tuesday, with 20 tons of ore, consigned to Messrs. Wilson, Peck, and Co., from Wheal Jamaica. The Ellerslie and Bardowie Company have announced the intersection of the lode in the deep cross-cut at Salisbury Plain. This intersection is the lowest depth from surface at which any lode has yet been penetrated in the colony. A few tons of good ore had been broken out of the new branch. The Hope Silver-Lead Mine, in private hands, was being both scientifically and energetically worked. The Mount Salus, another private adventure in St. Andrew, had just been started. The Rio Grande Company's report was very satisfactory. A good pile of ore had been broken out, and there were several tons undressed at surface. Messrs. Wilson, Peck, and Co. have received a parcel by the *Whistling Wind*, and, when sold, we will give the result.

Mining Correspondence.

BRITISH MINES.

ALFRED CONSOLS.—M. White, Sept 15: The lode in Field's engine-shaft, sinking below the 140 fm. level, is 3 ft. wide, unproductive. No change to notice in any of the drivings on the south lode in the western part of the mine since last report. The north lode in the 100 fm. level, east of Davey's engine-shaft, is about 12 ft. wide, worth for copper ore for the whole width 80*l.* per fm. At present we shall drive on the south part, and take down the north part after. The south lode in this level east is looking promising. The north lode in the winze sinking below the 80 fm. level is worth for copper ore 140*l.* per fm.; this winze is sunk 9 fms. below the 80 fm. level. The south lode in the stopes, east and west of winze, is worth for copper ore 60*l.* per fm. All the other parts of the mine are just as for some time past.

BALLYVIRGIN.—R. W. Smith, Sept. 16: The following is a list of the bargains set and working for the present month:—The engine-shaft to sink by nine men, at 16*l.* per fm. The cross-cut to drive east by six men, at 8*l.* 10s. per fathom; ground looking kindly. No. 1 stope, north of engine-shaft, by eight men, at 4*l.* 10s. per fm.; this stope will yield 2½ tons of lead, and 1 ton of copper ore per fm. No. 2 stope in same level by six men, at 3*l.* 15s. per fm.; this stope will yield 2 tons of copper and about 1 ton of lead ore per fm. The north level set to drive by six men, at 11*l.* 11s. per fm.; the lode in this level continues hard for driving in; it will yield 1½ ton of lead and 1 ton of copper ore per fm.—remainder of lode sulphur.

BEDFORD CONSOLS.—J. Hodge, Sept. 18: The men are quite prepared for resuming the sinking of the trial (now the engine) shaft with all possible dispatch. As yet we have no water in this shaft, and hope to sink several fathoms without any. No time shall be spared to prove the value of the lode, of which you shall be advised.

BEDFORD UNITED.—J. Phillips, Sept. 17: The lode in the 130 east is 2½ feet wide, producing good saving work; in the same level west the lode is large, but at present unproductive. The lode in the 115 west will turn out from 2 to 3 tons of ore per fm. In the rise above the back of this level the lode is still worth 3 tons of ore per fm. The lode in the stopes in the back of the 115 east will turn out from 6 to 7 tons of ore per fm., and in the bottom of this level the stopes are yielding from 3 to 4 tons of ore per fm. Jackson's stopes, in the 103, will yield 5 tons of ore per fm. In the 90 west we are driving by the side of the lode. No lode taken down in the 47 or the 35 since last report.

BOLENOWE.—W. Roberts, Sept. 16: No alteration since last reported on.

BUTTERDON.—T. Grenfell, Sept. 17: The engine-shaft is sunk 4 fms. 3 ft. below the 45, we have both taken down and drawn to surface several horse-whim kibbiesful of the lode, consisting of fluor-spar and lead ore, superior in quality to any that we have before met with. The lode at present is 14 in. wide, and continues to improve.

CAMBORNE CONSOLS.—W. Roberts, Sept. 16: In the 10 west, on the caunter, he lode continues 1½ foot wide, worth 1 ton of ore per fm. In the 20, west on ditto, he lode is nearly 1 foot wide, producing good stones of ore.

CARRACK DEWS.—W. Hollow, jun., M. Dunn, Sept. 15: There is no change in the lode at Battery shaft; it still produces stones of ore, but nothing to value. We hope to reach the 50 by the end of the month. In the 42 east the lode is 18 in. wide, and unproductive; in the stopes over this level the lode is worth 3*l.* per fm. In the cross-cut at the 30 we have cut the lode, and opened on it for 9 ft. in length; it is now worth 12*l.* per fm. We find we have been driving on the wrong part of the lode, and think we shall find the part of the lode just discovered to be standing for several fms. behind the end. We have holed the winze below the 20, on the south lode, which we find to be the same as that cut in the cross-cut, but we have not taken down any lode since the last report; present value 4*l.* per fm. At Eley's shaft the lode is without alteration; also in the 32 west. In the 32 east the lode has declined; it contains a little ore, but not sufficient to value.

CARVANNALL.—W. Roberts, Sept. 16: In the 118 west the lode is 2½ feet wide, principally composed of mundic and crystallised iron. In the 106 west the lode continues 5 feet wide, producing 1 ton of ore per fathom. Other parts of the mine are much the same as last reported.

CARVATH UNITED.—J. Webb, S. Truran, Sept. 16: The 30 fm. level is extended east of engine-shaft 9 fms. on the south part of the lode, which is 4 feet wide, good work for tin, and improving as we extend it; this level is driving by four men, at 45s. per fm. The 30 fm. level is extended west 9 fathoms, where the lode is very wide, full 8 feet, containing some tin, but not rich for this distance, but the present end is much improved, and likely to continue to do so, as we have left an excellent lode for tin in the winze, which is sunk 40 fms. below the 20; but still 20 fms. west of the 30 west end this appears to be a new run of tin ground, and affords most sanguine expectations that much mineral will be found in this direction. The 20 end men have been employed in sinking this winze, but have now resumed the 20 west, at 40s. per fm. It is our intention to extend the 20 and 30 fm. levels west with all speed, and as this is at a good depth (50 or 60 fms. from surface), and can be explored for 40s. or 50s. per fm, it is likely to be opening out abundance of ore ground. We have not done much on the copper lode of late, but shall cut into it occasionally, as we extend on the tin lode. It will require about seven or eight weeks to communicate the 30 with the winze noticed above, we shall then be in a position to get more and better tinstuff, and increase the sales, but until this communication is effected we shall not have sufficient air in the 30 to put on the stoping on the lode. Every department at surface and underground is in good working order, and presenting a cheerful appearance. We shall sell this week from 200*l.* to 300*l.* worth of tin.

CHOLLACOTT CONSOLS.—T. Nancarrow, Sept. 18: I have again inspected this mine, and the lode I mentioned in my last week's report, as having been discovered by the former in his farmyard, has now been sunk on at some little depth, and produces a quantity of spar and micaceous iron, with strong spots of yellow copper ore; its bearing, as I stated in my last week's report, is that of "Bedford United," misprinted "Bedford Consols." However, my opinion is still the same, that it only requires a spirited outlay to make this a profitable mine.

CLARA.—S. Trevethan, Sept. 17: The water is again in fork, and the men in a regular course of working in the rise, but slowly progressing, in consequence of the water coming so fast through the lode from the old workings. The lode continues much as before, producing about 15 ewts. of ore per fm.

COLLACOMBE.—S. Mitchell, Sept. 16: The lode in the 62, west of the western shaft, is worth about 1 ton of rich ore per fm. The 50, west of the western shaft, has been driven since last reported on 4 ft., and the orey part of the lode is 3 feet wide, worth about 1½ ton of good ore per fm. The stopes throughout this mine are worth on an average from 25*l.* to 30*l.* per fm. Other points continue as last reported on. We hope to sample about 150 tons of good ore for the present month.

CUBERT UNITED.—J. Trewin, Sept. 13: The lode in the 76, south end, is 16 in. wide, composed of quartz, mundic, and flookan, producing a little lead. The stopes in the back of this level are worth about ½ ton of lead per fm. The lode in the north end still maintains its size and character, 18 inches wide, composed of a very kindly quartz, carbonate of iron, &c., worth about 2 ewts. of lead per fm. The lode in the 76 fm. level, south of the sump winze, is 12 in. wide, composed of quartz, &c., producing some spots of lead; the ground appears to be getting more favourable. The stope in the back of the 66 fm. level, south of the engine-shaft, will average about 18 ewts. of lead per fm. North of Towsey's shaft, the stopes are worth 5 ewts. of lead per fm. The lode in the 66 end, south of Towsey's shaft, is composed of quartz, mundic, and lead, worth of the latter about 5 ewts. per fm.

CWM DAREN.—F. Evans, Sept. 15: The lode in the 50 west is 1 ft. wide, principally composed of spar, and poor for lead or copper. In the stope in back of the 40 west there is a decent branch of copper ore. We are carrying the copper to Aberystwith, and crushing the lead stuff.

DEVON AND COURTENAY.—T. Richards, Sept. 8: The 90 has been extended west altogether from the sump-winze about 35 fms.; throughout the greater part of this driving the lode presents a very promising appearance, being in places full 2½ ft. wide, containing copper ore, quartz, and mundic; and at the 14, west from the sump-winze, there is a sink gone down in the bottom of the level for about 2 fms. long, in the bottom of which Capt. Bawden informs me there is a good branch of ore, from 10 to 12 in. in width, but in consequence of water it cannot be conveniently worked until a deeper level shall have been reached. In the backs over this level, near the sump-winze, the lode has been very productive for about 10 fms. in length, and there are still many fms. of ground remaining that will let at a low tribute. About 25 fathoms west of the sump-winze a beautiful cross-course has been intersected and opened on several fms. northwards; the underlay is to the east, and from its general character, more particularly near the lode, where it is composed chiefly of mundic and some rich copper ore, I consider it a good indication of productiveness of the lode at a deeper point. To the west of the cross-course the lode and ground is disordered for about 4 fms. in length, but from that point to the present end the indications are more favourable, the lode large, and of

a very promising character. The 80 is extended east on the course of the lode 25 fms. (to another cross-course), but no ore of value has been laid open, except near the top of the sump-winze, where some tribute ground has been worked in the bottom of the level. The 80 is extended west about 75 fathoms; some very rich ore ground was discovered in the back and bottom of this level, the greater portion of which has been extracted, but under this the ground became very soft and disordered before it reached the 90; however, such changes are of frequent occurrence, and as the lode is so promising in character, both to the east and west of it, there is a great probability of its becoming very productive again in depth. I would observe that the lode in this level (the 80), nearly throughout the driving westward, is of the most promising description, containing a little ore all the way, both in bottom and back of the level, a portion of which will pay for taking away on tribute. In the back of the 70, east of the engine-shaft, there is a piece of tolerably good ground, that will pay for working at a moderate tribute. Having shown in the foregoing the principal workings of the concern, and the general features of the lode, which indicates most favourably in depth, I would recommend you at once to deepen the mine, and should the lode improve at the 90 and 100, as I anticipate, I should then advise you by some means to alter the engine-shaft, so as to bring it to bear on the lode, which is now 23 fathoms southward, as shown by cross-cut at the 80, but I would not do this until more ore is discovered. I would, however, erect the rotary-engine, now on the mine, and attach a crusher thereto, for the better discharge of stuff, and dressing the ores: and for the present deeper sinking carry the machine chain through the 80 cross-cut, for drawing up the ores and deads, instead of as now by manual labour, by which method a great saving is effected, and no difficulty experienced in working the mine. I should for a time confine the underground operations on this lode to the sinking of the sump-winze for a 100 fm. level, and the driving the 90 fm. level west in under the very promising lode driven through in the level above (the 80), and also work all the paying tribute pitches, which will materially assist in paying the working costs.—North Lode: An adit level is being driven on this lode, the present end of which has a very encouraging appearance, producing magnificent stones of copper ore. This level should be continued with as much force as possible, having such good indications of approaching a course of ore; and, as soon as circumstances warrant, a cross-cut might be put out from the engine-shaft in the 80, or any other levels.

— T. Bawden, Sept. 18: We have a very good improvement in the adit end on the north lode, the lode being about 4 ft. wide, with a leader of copper ore fully 1 ft. wide, worth 20*l.* per fm.

DEVON BURRA BURRA.—T. Long, Sept. 18: As desired by several shareholders, I have to-day inspected this mine, and since my last survey they have sunk about 9 fms. The ground sinking at the shaft is altogether very kindly, and the country this last week or two is most congenial for making large deposits of copper ore, every fissure producing strings of horseflesh and yellow copper ore. The shaft is now sunk about 37 fms., and they purpose sinking to the 40, and then drive to cut the lodes, in doing which I am strongly of opinion that in cutting the south lode they will open a good mine. The shaft at present is very porous, admitting an increase of water, there being a branch of spar passing through it. My opinion of this mine is the same now as when I first inspected it—that from its being close to the granitic range, with such a splendid cross-course, ultimately the shareholders will be more than amply rewarded for their spirited outlay, and that the time is not far distant when the Devon Burra Burra will prove to be a rich and lasting mine.

DEVON WHEAL BULLER.—Wm. Neill, Sept. 18: The lode in the 32, driving west, is 3 ft. wide, producing ore throughout—good saving work. The rise in the back of this level is producing saving work. The 32, driving east, has a more promising appearance, producing good stones of ore. The stope in the back of the 20 east is producing 1 ton of good ore per fm. The stope in the bottom of this level is producing ½ ton of good ore per fm. The stope in the bottom of this level, west of the cross-course, is producing 1 ton of ore per fm. There is no alteration in any other part of the mine.

DHURODE.—W. Tonkin, Sept. 15: The engine-shaft is down 9 ft. below the deep adit; it is not yet through the elvan course; in the ground there is a slight mixture of quartz and copper. In the end driving west, at deep adit from plat, the ground is composed of elvan, killas, and quartz, with good copper ore, though not yielding so largely as in my last report. The stopes in the backs are still producing good quantities of copper. The stope in the back of the great caunter lode, at shallow adit, having much improved, I put two additional cores at them; they are yielding copper of good quality for crop-dressing, and all the stones and quartz are good for stamp work. We are preparing the ores for shipment, expecting shortly to have an opportunity to send them to market.

DYFNGWM.—E. Davies, Sept. 15: The 70 cross-cut is being driven with all speed at present. The 60 east continues orey, and the stopes in the back of the same level are productive. The 60 west is not quite so orey as it was, but I dare say will improve in a few days. The stopes in the back of the 60 west are producing very good ore indeed—in fact, better than I have ever seen there. No change in the 50. The dressing department goes on as well as when I last reported—a good lot of stuff coming out, and of good quality. We are shipping by the *Elizabeth and Mary*.

EAGLEBROOK.—H. Tyack, Sept. 15: In driving the 20, west of engine-shaft, the lode in the end is much of the same character as when last reported on. In the 10, west of engine-shaft, we have discontinued driving on the branch going north-west; the men are now driving on the south wall of the lode as before. I am glad to inform you that the lode in this place is improved; we have now a solid branch of lead in the end, about 4 in. wide, and the ground is easier for driving. No. 1 stope, in back of the adit level, east of the engine-shaft, still continues to yield about 15 cwts. of lead ores per cubic fathom. In No. 2 stope, about 20 fathoms east of the shaft, the lode is much the same as when last reported, yielding from 15 to 20 cwts. of lead ores per cubic fm. We have a great quantity of orey stuff broken in the stope in this level, west of the engine-shaft; I thought it best to take the men from this stope to try in the back of the 10, east of the engine-shaft, about 6 fms.; we have a good mixture of lead ores in this place, about 8 in. wide, and it will pay well to take away. On surface, the erection of the 30-ft. wheel is completed in a very satisfactory manner. Our carpenters are busily engaged in fixing the pulley, stands, rods, &c., and will get it to work as soon as possible. All our dressing operations are going on well. We shall sample on Wednesday next 25 tons of lead ores, 14 tons of white and 11 tons of blue, of good quality.

EAST BLACK CRAIG.—J. Smitham, Sept. 13: The ground in the 12 fm. level, west of shaft, is a little harder for driving than when last reported, but there are still a quantity of branches and faces of spar scattered throughout, with some flowers of jack in them. The rock in this end appears to be very like that in the back of the adit level, about 5 or 6 fms. from where the old men had the bunch of ore that we are expecting to cut in this end, if it holds down. Since I wrote last, the men who are working the pitch in the back of the 22 fm. level, west of shaft, over the ladder-road winze, have holed up to the bottom of the 12 fm. level, but there is still some good orey ground in the west end of this pitch, and the men are now driving west from their west trap hole up about 4 to 5 fms. from the back of the 22 fm. level; this end is poor, but if the orey ground holds down they will cut it in driving about 8 or 9 ft. more. The pitch in the back of the 27 fm. level, east of shaft, has improved a little for lead this week. The pitch in the back of the 22 fm. level, east of shaft, has also improved a little for lead this week. The pitch in the back of the 27 fm. level, west of shaft, is poor, and the men have taken an old pitch in the back of the 22 fm. level, west of shaft, at 7*l.* per ton. We have set a pitch this week in the back of the adit level, west of shaft, to two men, at 7*l.* per ton. There is no change worthy of notice in any other place since last week.

EAST FOWEY CONSOLS.—Capt. Dale, Feb. 17: The ground at the engine-shaft is a little harder than when last reported, and a shade bluer, containing some spots of rich yellow ore. Sharland and Cockell's lodes are without alteration to notice. The men are progressing with the cross-cut, to intersect the new lode with all speed. We have completed the engine-bob, and set it to work, which is doing well. The engine is now consuming only 4½ cwts. of coals in 24 hours.

EAST HENDER.—W. C. Vivian, Sept. 17: The lode in the adit level east is 2½ ft. wide, and producing good stones of yellow copper ore. We are driving the adit south for the purpose of intersecting a lode said to be from 30 to 35 fathoms from the present one, and which report speaks very highly of.

EAST ROSEWARNE.—W. C. Vivian, Sept. 17: We have cut down the engine-shaft from the adit to the 12, and fixed our lift, and are now dropping our pit-work under the 12, and clearing up the shaft, which we find quite full of rubbish. We hope to get to the bottom during the present or early in the ensuing week. We have cleared the 12, east of the engine-shaft, to the end, a distance of about 35 fms., where we find the lode disordered by an elvan course, but, behind the end, about 8 ft., we find a branch of copper ore in the back, which will work at a moderate tribute (say 10s.), and which we shall let at once: we shall also immediately commence driving the 12 east. We are proceeding rapidly with clearing the 12 west, where, according to reports of men and agents who were formerly connected with this mine, we shall find a good run of ore ground. In my next report I shall be able to speak as to this from my own observation. We met with a rich branch of copper ore in the adit level, west of the engine-shaft, two days since, found by a feeder falling into the lode from the north-east; it is not looking so well as it did at first, but we think that there is every probability of its again improving.

EAST SORTRIDGE.—A. Down, Sept. 18: We are now engaged in cutting down and securing No. 1 trial shaft for an engine-shaft, preparatory to the reception of the pitwork, &c., which we shall be able to commence dropping in a short time.

EAST WHEAL FALMOUTH.—J. Cock: The engine-shaft is now down about 7 fms. below the 10 fm. level, and it is expected it will be down for a 20 fm. level, and the lode intersected at that depth in about nine or ten weeks. The 10 is driven northward about 25 fathoms through a productive lode; the lode in the present end will yield about 12 cwts. of lead per fm.; the lode taken away in driving this level, and stoping the backs, has on an average yielded nearly 1 ton of lead per fm., and the improvement in the appearance of the lode in this level, compared with the ground above, is so great that I have no hesitation in giving it as my opinion that the next level will be a very productive one; the 10 is driven south about 12 fms., the lode throughout this driving is poor; this end is now being driven to intersect the copper lode, which will be accomplished in the course of a few weeks. In addition to the ores already sold, there are now on the mine about 25 tons of lead and several tons of jack, which, when sold, will leave a profit to the shareholders.

EAST WHEAL RUSSELL.—W. Metherell, Sept. 18: The 88 continues much the same as last reported, producing good saving work. The 66 is also producing good stones of ore, it appears we are coming in the splice of "horse." The lode in the 55, east of Homersham's shaft, is becoming smaller, and not looking so well as last reported. The sinking of Homersham's shaft is progressing with all possible speed.

ESGAIR MWYN.—S. Vial, J. Paull, Sept. 13: The engine-shaft is sunk 5 ft. below the 65 fm. level; that part of the lode which is being carried at the shaft is from 5 to 6 ft. wide, and of a very promising character; we have to-day drawn some good work from it. In the 65 east we have a very promising lode, worth 10 cwts. of ore per fm. At Esgair Ddu, the lode is without ore, but a more promising one we have never seen; it is large and well defined, and contains all the usual components of a productive lead lode.

FEE DONALD.—J. Muffett, Sept. 15: The branch of ore in sinking under level B, on Smiddy lode, is as good as when last reported, worth from 1½ to 2 tons per fm.; it is a good branch of ore, and the ground a little more favourable for breaking.

GAWTON.—J. Hambly: Our setting on Saturday went off satisfactorily. In the 34, driving by six men, the lode is looking much better; in this level the lode is worth 20*l.* per fm., from which we shall soon begin to raise a sampling of ore. In the 36 the lode is worth 18*l.* per fm.; here we expect further improvement. The ground in the cross-cut south is much improved, with branches of mundic, as if near a lode. I have no doubt of having a good lode in this level when cut, as in the adit level west about 200 fms., this south lode has been seen, and reported to have turned out 20*l.* worth of ore in a small space before the old level runs together; this looks well for a good lode in the 36 when cut.

GERNICK.—H. Miners, Sept. 13: In the 52 we have had no change of value since my last report; the lode is 1 ft. wide, composed chiefly of arsenical mundic and good stones of grey copper ore, and the ground is a little more favourable for driving. We have commenced dressing the stuff from this level, which is yielding some good ore. From the south lode we have sampled about 200 sacks of tinstuff, for sale on Tuesday, Sept. 16. This lode is much of the same character, yielding good saving work for tin. We have not cut the lode in the trial-shaft as yet.

GREAT HEWAS UNITED.—J. Webb, Sept. 18: The Wheal Elizabeth shaft is nearly completed to the 86 fm. level; the lode in the 76, west of this shaft, is yielding good work. In the 86, east of Northey's, we are rising to communicate to the 76, and find the lode improving; the south lode at this level has improved since my last. The lode in the 36 east is large, saving work. The stopes in the back of the 76 are producing good work. The various tribute pitches are yielding tinstuff just as usual. We shall sell the month's tin this week (10 tons), which will about cover the cost-sheet.

GREAT POLGOOTH.—R. Hancock, E. Dunstan, Sept. 13: The lode in the 126 is still poor and small. The lode in the 116 is heaved north by a slide or cross-course, and we are now driving to cut it. We have opened about 9 ft. in length in the back of the 96, from which we have broken some good work, but whether this is the main lode, or whether that lode is before us, requires a little time to prove.

GREAT SOUTH TOLGUS.—J. Daw, Sept. 17: The lode at the new shaft sinking below the 70 is 1½ ft. wide, producing some good ore. In the 70 the lode is 2½ feet wide, producing 5 tons of ore, worth 45*l.* per fathom. The lode in the winze sinking below the 60 is 2 ft. wide, worth 40*l.* per fm. The stopes in back of the 50 are worth 50*l.* per fm. We hope to put the new engine and crusher to work in a few days.

GREAT TREGUNE CONSOLS.—J. Spargo, Sept. 17: At Hobler's shaft, there is now a leader of ore in the bottom, from 6 to 7 in. wide, running right through the shaft from east to west upon the footwall, with every indication of its increasing as we go down. This shaft has been sunk about 3½ fathoms under the 40, and is now sinking with all speed. The lode in the 40 is still large, and producing good stones of ore.—Carkee's Shaft: We have completed the plat in the 40, and put in the cistern. We shall this day commence dropping the lift, so as to begin sinking again as rapidly as possible.

GREAT WEST SORTRIDGE.—J. Richards, Sept. 18: At the engine-shaft the ground is a little improved. The lode is composed chiefly of the finest capel, mundic, quartz, and a little rich ore, and is altogether exceedingly promising. There is nothing new in the 20 west.

GREAT WHEAL ALFRED.—M. W. Mitchell, W. Bugelhole, Sept. 13: The lode in the 18, east of Painter's shaft, is 2½ ft. wide, principally composed of killas and spar. The lode in the 180 west is 2 ft. wide, worth 18*l.* per fm. The lode in the 170, west of Copper-house shaft, is 7 ft. wide, worth 30*l.* per fm. The lode in the winze sinking below the 160 (13 fms. west of the latter level) is 3 ft. wide, worth 70*l.* per fm. The lode in the 160, west of Copper-house shaft, is fully 8 ft. wide, and worth from 60*l.* to 70*l.* per fm.; the rise in the back of this level is worth 50*l.* per fm. The lode in the 148, west of the latter shaft, 20 ft. behind the end, is worth 18*l.* per fm.; the lode in the present end is disordered by the flookan, but still producing some good ore; this end is now within 7 fms. of the rise back of the 160. The south lode, in the 137 end west, is worth 12*l.* per fm. There is no change to notice in any other part of the mine.

GREAT WHEAL BADDERN.—J. Jenkin, Sept. 16: We have commenced driving the 61 east, and intend to continue it as fast as possible. We hope in a short time to intersect the elvan, where we anticipate good results. The air at present is very good. The lode in the 51 west is 2 feet wide, producing some saving work for lead. In the stopes in the bottom of this level, east of the eastern engine-shaft, the lode is about 1¼ ft. wide, worth 30*l.* per fm. The lode in the 30 is about 4 ft. wide producing good saving work, and opening tribute ground. The tribute pitches are without any alteration.

GREAT WHEAL VOR.—Cresse's shaftmen have fixed the angle-bob complete in the 144, sent down the main rods, and connected them to the bob, put in stays and linings, and on Wednesday next we shall send away the drop-lift to drain the water below. Trelawny's shaftmen have been taking down ground in the shaft over the 154, fixed the necessary timber and secured the same, and are now putting in pent-houses over the ladder-road for taking up water; and are ready with the pumpwork, when the water is in fork, to send away the drop-lift. The water is now at the 164. The pumping and winding-engines, with the steam-stamps, are in good condition, and doing their work well. On main lode, No. 81 stopes in the back of the 90, east of Highburrow, are worth 20*l.* per fm. Nos. 82 and 83 stopes, in the bottom of the 90, east of ditto, are worth 21*l.* per fm. No. 117 stope in the back of the 90, west of No. 81, is worth 18*l.* per fm. No. 114 stope in the bottom of the 90, east of ditto, is worth 26*l.* per fm. No. 113 stope in the bottom of the 90, east of ditto, is worth 18*l.* per fm.—No. 105. Bounder Shaft: The men in this are making good progress for the skip below the 96, and the quantity of tinstuff already drawn to the surface by it is beyond our anticipation.—Trueman's Lode: No. 48. In the 30, east of Culmn shaft, the lode here is large, and the rich leaders of tin are uniting; by extending a short distance, the lode will be found of more value.—Wheal Metal: No. 43. The men from the 70 east, with those from No. 42 (70 west), have been sinking a winze in the bottom of the 70, on Schneider's lode, to communicate with a rise from the 80; lode worth 130*l.* per fm. In No. 70 stope, in the back of the 70 west, the lode is worth 35*l.* per fm. No. 123: Rising and stoping in the back of the 80 west, the lode is worth 40*l.* per fm.—Schneider's Lode: No. 129. In the rise in the back of the 80 the wall of the lode continues to present tin of first quality, and indicates the lode to be exceedingly valuable. No. 121: In the 80, west of cross-cut, the lode is worth 80*l.* per fm. No. 102. The 70, east of ditto, worth 120*l.* per fm. No. 103. In the 70, west of cross-cut, the lode is worth 130*l.* per fm. No. 116. The stopes east and west of the cross-cut, over the 70, are worth on an average 100*l.* per fm.

GWYDYR PARK CONSOLS.—H. Rawson, Sept. 19: The ground in the Cross Mawr level has a better appearance for lead than when last reported on; there are a deal of branches and faces of spar scattered through it, with some strings of lead, about 2 in. wide. We are within 3 fms. of the Vuchaslas lode.

HAWKMOOR.—J. Richards, Sept. 3: The eastern engine-shaft is now down 8 fms. 3 feet below the 40; the north part of the lode is very regular, but the south part is split up in branches for 6 feet off the footwall. In the 40, west of the above shaft, the lode is still large, and producing some saving work for copper, but it is now disturbed by small cross heads in the lode; 40 kibbles of the ore are at surface, quite enough to warrant a good mine in depth. Old miners' shaft is 7 fms. under the 30, and the lode has a very promising appearance, and sinking about 3 feet a week.

HERWARD UNITED.—J. Lightoller, Sept. 18: The mines look much the same as they did when I last wrote you. Wepre's shaft is down from surface 34 fathoms. Batters's engine-shaft is 10 fms. deep, and is at present being walled up. The whole of the engine will soon be on the mine, when we shall have it erected in readiness for sinking the last-named shaft below the 10.

HINGSTON DOWN CONSOLS.—W. Richards: The lode in Morris's shaft is from 3 to 4 ft. wide, interspersed with ore. The lode in Doidge's winze is 4 ft. wide, carrying a little ore in places. The lode in the 85, east of Doidge's winze, is very large, with good spots of ore in places. The lode in the 75, east of Doidge's winze, is 10 ft. wide, orey throughout, but of coarse quality. The has been no lode taken down in the 55 east since last report. The stopes and pitches continue much as usual.

HOLMBUSH.—In the 145 west, on the Holmbush lode, the lode is in good congenial killas, and is producing 1½ ton of ore per fm., worth 8*l.* per ton; in the end north, at this level, the lode intersected is 1 ft. wide, composed of quartz, capel, and mundic, but the point of intersection being so near the lead lode, no opinion of its value can be given before some little distance has been opened west upon it. In the rise in the back of the 145 west the lode will produce 1½ ton of ore per fm., worth 8*l.* per ton. In the 145 east the lode at present is not quite so large as when last taken down, it will now produce 1 ton of ore per fm., worth 9*l.* per ton; the lode in the stopes in the back of this level will produce 2 tons of ore per fm., worth 10*l.* per ton. In the 132, west of the lead lode, the end is driven through the cross-course, the lode is improved, and will now produce 1 ton of ore per fm., worth 9*l.* per ton; the stopes in the back of this level will yield 1½ ton of ore per fm., worth 8*l.* per ton; the lode in the winze in the bottom of this level is a little improved, and is now producing good stones of ore. The lode in the 124, west of Wall's, continues to yield 1 ton per fm., worth 7*l.* per ton. The cross-cuts are progressing satisfactorily.

HUCKWORTHY BRIDGE.—J. Key: We have this morning, in costeaning east of the Mill, met with a lode about 5½ ft. wide, composed of gossan, prian, flookan, capel, and spar; altogether a splendid looking lode, and carrying two regular walls. This lode is the same as in the old Huckworthy Bridge Mine further west, which was worked about 18 or 20 years since.

IVYBRIDGE.—J. Cleno, H. James, J. Hitchins, A. Murray, Sept. 15: Having again inspected the workings made since the last visit, we are glad to report an improvement both in the north and south ends of the 78: in the latter the lode beyond the cross-course is cut, having a leader of orey work for about 1 ft. wide, worth, at this time, about 15 cwts. of lead ore per fm, very regular up and down the end, and possibly may improve in driving on, which, of course, should be done. North, instead of the dead ground when we last saw it, it is now in a large lode with two branches, each containing a little lead, one east and the other west, with ground between them, all 6 to 8 ft. wide; taking this in conjunction with the sink in the 68, called "Cholos," we think better of this part of the mine than before, although the rise put up from the 78, a little behind this end, and now holed to the level above has made no discovery of ore; on the contrary, it has proved the 68 and 78 to be on the same lode, which before was in some degree doubted; a little to the north of this rise there are two branches, on the western of which there is some good ore, if so an intermediate cross-cut west will cut or at least prove it. These works should, in our opinion, be carried out to such an extent as the appearances daily occurring will warrant; and, while doing, the stopes should be set as far as they will yield any profit on working, &c., as the engine will cost no more to keep the water, whether for twelve or a greater number of men. We see nothing else to notice excepting that should the north end prove good, a winze can be sunk, or rather rose from the 78 to the 68, in the orey ground, both for convenience of working and air, &c. The new engine-shaft being holed to the 68, sufficient to take a lift to the relief of the old shaft, the pumps in which are worked with horizontal rods and diagonal bob, with a consequent increased cost of coals, it is proposed not to square it down, but to place a lift therein only till the results of the trials recommended are known, the which will employ as follows:—south end, 78 fm. level, six men; north, ditto, six men, and cross-cut; stopes, ditto, four men; to change lift, &c., six men, one month = 22 pitch men; and the necessary staff, computed as for items furnished at about 250*l.* per month, the which the present appearances recommend.

KELLY BRAY.—S. James, Sept. 15: We have intersected the south branch in the winze sinking in the 90 east, which I named in my report for the general meeting; this branch is underlying north towards the lode, and will soon fall in with it, so by this means we shall prove the effect it will have on the lode, and also show us the position of the cross-cut in the 100. According to Mr. Webb's dialing, we must be driving in the right direction; the lode in the winze is still strong and healthy, and yielding good work: the winze is sunk nearly 5 fms. below the 90, and we can hear the men working very plainly in the cross-cut. The ground is still mineralised in the cross-cut, and water oosing from it, showing indications that we are near something. I trust that we shall meet with the lode soon. The lode in the 90 east is still 3 feet wide, a good orey lode; I hope it will continue so far east as the eastern cross-course, which is underlying east, when there will be every reason to expect the shoot of ore to follow the cross-course east; in which case it will be lengthening eastward against the dip of the stratum, which is considered to be a good feature. The lode in the winze sinking in the 90 west is still worth 20*l.* per fm.

KESWICK.—R. B. Shepherd, Sept. 13: The lode in the Salt level is improved, now worth 10 cwts. of ore per fm. In the 30 north the lode will produce 3 cwts. of ore per fm.; the stopes in this level are as follows:—No. 1, worth 12 cwts.; No. 2, 10 cwts.; No. 3, 10 cwts.; No. 4, 10 cwts.; and No. 5, 12 cwts. per fm. In the 40 north, the lode is yielding 8 cwts. of ore per fm.; the stopes here are worth—No. 1, 8 cwts.; No. 2, 5 cwts.; and No. 3, 10 cwts. of ore per fm.

LLANDUDNO.—In the 56 yards level north, at bottom, we have cut a strong cross-joint, on which we have two men to rise to prove some of the beds above; the north end, driving by four men, is worth 10*l.* per fm. In the 56 cross-cut, opening on the western strings, the ground is hard, and intermixed with small cavities, which make it difficult for driving. We expect to cut some strings in this place shortly. We have set four men to clear a winze which was formerly sunk in the bottom level to prove a deeper bed under one of the bunches of ore; it seems, however, that little was done, and we have purposed to make some trials in it. At Treweek's shaft there are six men stoping the back of the 120 north; this place looks much the same as it has for some time past, yielding a great deal of low-prise ore. The 110, driving north on Ellis's, is somewhat improved, worth 10*l.* or 12*l.* per fm. The pitches are generally poor. The last samplings of ore have been delivered at Amiwch, and we commence sending off the waste ore on Monday next, of which there are between 200 and 300 tons raised ready for shipment.

MOLLAND.—T. Bennetts, Sept. 17: The lode in the 20 east is much the same in value as reported last week, worth 6*l.* per fm. In the 5 east we have a large orey lode, worth about 6*l.* per fm.; this end is, however, suspended for the present, and the men are now rising against the winze, in order to hole as soon as possible, so that a better ventilation may be obtained. The lode in the winze sinking below the adit is split up into small branches. I was at Barnstaple yesterday, and succeeded in shipping off the ore. I have also apprised Messrs. Bath and Sons of the same, and requested them to get the parcel sampled the first opportunity.

NANT-AR-NELLE.—J. Thomas, Sept. 16: Our operations have been confined to driving the adit level east on the course of the lode. We have extended this level on the course of the lode about 18 fms. since March last; on an average, the lode is about 10 ft. wide, composed of spar, blue killas, mixed with specks of mundic and silver-lead ore. I think, by the water which is flowing out from the present end, that we are about to cut another lode, at which junction I expect to have a good course of ore. The other men are busily engaged in putting in the air-pipes, according to Mr. Brook's order, who was at the mine last Saturday.

NANTEOS AND PENRHIW.—M. Barbery, Sept. 15: In the 10, driving east of Penrhiw, the lode is not looking so well as when last reported on, being 9 or 10 in. wide, and yielding at present 4 or 5 cwts. of ore per fm.; this level west will yield about 8 cwts of ore per fm.; in the stopes over this level, east and west of shaft, the lode, on an average, will yield about 8 cwts. of ore per fm. In Grovernor's winze, sinking below the deep adit, the lode at present is unproductive. In the deep adit, driving east towards Bwlch Gwyn, in order to facilitate its progress, we are only carrying a small portion of the lode, which is producing occasional stones of ore. In the Eystumtean deep adit, driving east of cross-cut, the lode is spotted with ore, but not sufficient to value. The other stopes and pitches are looking about the same as usual, and yielding a fair quantity of ore.

NETHER HEARTH.—W. Vipond, Sept. 12: Agreeably to your wish, I have been through the mine to-day, to examine more particularly the quantity of ore broken, in and out of the mine. In the first place, 59 bings have gone to Alston. We have in and out of the mine 16 bings, 35 bings laid aside for crusher, and 20 bings at new level. The completion of the new shaft will enable us to place more men to get ore next week. The average quantity raised for some time past has been 12 bings per week, with ten men; if the mine continues as at present, the quantity of ore raised for the future will be a great deal more.

NEW CARREG HOVA.—Capt. Lister, Sept. 17: There is a great improvement in the lode in the north level yesterday and to-day; it is now producing large lumps of rich green carbonate of copper ore. The roof in the south level is also producing a large quantity of ore, but not so rich as that in the north level. This week the ground in the upper level is producing an abundance of copper ore, with some lumps of lead. The cross-cutting from the new shaft is still hard, the bed in the roof of the cross-cut being strongly mixed with copper. We have now a boat load of 18 tons of copper ore ready dressed for market.

NORTH BASSET.—T. Glanville, Sept. 16: In the 72 fm. level, driving west towards Grace's shaft, the lode is producing 5 tons of ore per fm. In the winze sinking below the 62 the lode is yielding 6 tons of ore per fm. In the 42, driving west of Grace's shaft, the lode is yielding 4 tons of ore per fm. The other parts of the mine are much as usual.

NORTH DOWNS.—J. Prince, Sept. 13: Prince's shaft has been sunk 2 feet this week, the lode in which looks quite as well as it did last week, and I am convinced that it is the main lode. The lode in the 20 east is 3 ft. wide, producing good stones of ore. In the 10, east of Bennett's shaft, we have discovered the caunter part of the north lode, and find that it produces 1 ton of ore per fathom. The south lode in the same level is somewhat enlarged, but it is unmineralised, and in my opinion not favourable to produce copper; should no improvement take place during the ensuing week, the end will be suspended driving. In the cross-cut, west of the engine-shaft, we have cut a quartzose branch, with ore; but as it is not cut through, I cannot report further on it this week. In order to ascertain what distance we have to drive the 10 cross-cut south, to cut the Coalyard lode, and to know what it would cost to accomplish the object, we placed men to costean the lode, which is now discovered, and about Monday or Tuesday we shall prove its dip, and a diagram shall be sent to the office for your inspection. At Peever, the stopes are producing tin, which will leave a fair profit to the shareholders.

NORTH FRANCES.—P. Hosking, Sept. 13: The lode in the winze is 2 feet wide, with ore throughout. The lode in the 54 west is 2½ ft. wide, looking well, with a little ore, and the ground very kindly for ore. The 54 east is much the same as described in my last. Eales's shaftmen will finish cutting the plat in the 54 next week. Mackean's shaft is progressing favourably. We are dressing the ore: I hope we shall have 9 or 10 tons to sample next Wednesday week.

NORTH LAXEY (ISLE OF MAN).—R. Rowe, Sept. 12: I was at the mine yesterday, and find little alteration since my last report; the shaft has not been sunk since then. The timber work has occupied the last fortnight, and will not be completed till to-morrow. Having altered the position of the wheel, we had to take down one of the ends of the shaft to suit the position which also took up some time. On Monday morning, however, the shaft will again be rapidly under way. The lode in the end are at present poor; that in the north end will, I think, soon improve; the lode is 5 feet wide, made up of decomposed rock and gossan, and very wet; the lode in the south end is at present very small. In quarrying out for the wheel-case parallel with the lode, and about 10 feet from it on the west side, we have met with a beautiful branch of ore, quite solid, in places of about 2 inches wide; it will join the lode southward, and drop into it at a few fathoms in depth, where it will be very likely to have a good effect. We have made good progress in the last fortnight with the surface work. The fine weather continues, of which we will take the utmost advantage to get the wheel up, &c.

NORTH LEVANT.—W. C. Vivian, Sept. 13: Gever Lode: In the 30, east of engine-shaft, the lode has much improved within the last few days, and is producing good stones of tin; in the same level west the lode is unproductive. In the 20 east the lode is large, but unproductive. In the 10 west the lode has improved in appearance, and is producing a little tin. In the level being driven on the carbons, above the middle adit, the lode is worth 20*l.* per fm.—Borlase's Lode: In the middle adit east of Borlase's shaft, the lode is producing good stones of tin; the stopes in the back of the same are worth about 10*l.* per fm. The stopes in the bottom of the middle adit east of Borlase's shaft, are worth about 12*l.* per fm., and those west of the shaft are worth 25*l.* per fm. The middle adit, north from Borlase's shaft, is at present unproductive; the stopes in the back of the same are worth 5*l.* per fm., and the stopes in the bottom are of about the same value. In the deep adit, south-east from Mexico shaft, the lode is improving in appearance, and is now worth from 4*l.* to 5*l.* per fm.

NORTH TAMAR.—Josh. Hodge, Sept. 18: The men are making good progress in driving the adit end; the ground is still as last reported, the lode also is the same about 1 foot, wide and kindly, but at present no lead. I hope to be able to report a change for the better on reaching the cross-course, and this is a point that we shall soon prove. The distance from the present end being only about 12 fms., in about the middle of October we shall reach it.

NORTH TOWY.—W. H. Reynolds, Sept. 13: In the north end, at the 28, the lode has a most promising appearance, but does not contain sufficient lead to value. In the cross-cut at the 20, driving to cut the main lode south of the caunter, we have broken some excellent stones of lead, which looks as though we are near a good lode; and in the other cross-cut at this level, which we are driving to cut the western lode, we have small branches of lead, which we hope will lead to something good. In the cross-cut driving to intersect the eastern lodes, we have branches of spar with blende and lead.

NORTH WHEAL ROBERT.—A. Pryor, Sept. 17: There has been no lode taken down in the 52 end, driving west, this week; the stopes in the back of this level continue to yield about 3 tons of ore per fathom. In the 42 end, driving west, the lode is about 5 feet wide, yielding 2 tons of ore per fm.; the winze sinking in the bottom of this level looks well, producing from 3 to 4 tons of ore per fm.; there are also three stopes in the back of this level, each yielding from 2 to 3 tons of ore per fm. The lode in the 30 end west, on the south lode, is not so productive as it has been, at present yielding 1 ton of ore per fm.; the stopes in the back of this level continue to yield about the same quantity of ore as when reported on last. Our next sampling, for this month, will be about 120 tons of good quality ore.

NORTH WHEAL TRELAWNY.—H. Hodge, H. Harvey, Sept. 18: The lode in the 46, north of the shaft, is 3 ft. wide, producing 3 cwts. of lead per fm. In the same level south it is 2½ ft. wide, producing 7 cwts. of lead per fm. The 36 north is suspended, and the men are engaged in sinking a winze in this level south of the shaft. At Magor's shaft, the cross-cut is extended west 11 fms.; the cross-cut east is suspended, and the men are engaged about other work.

NORTH WREY AND JULIA.—J. Hodge, Sept. 18: The shaft is being enlarged with all possible dispatch by a full pare of men, and by the end of the week this will be completed, when the sinking will be pushed on with all vigour. I think the two lodes are in this shaft, and in the cutting down we are breaking good stones of silver-lead from both. We have two men in the adit end driving north towards the shaft. We think we shall be able to erect a small water-wheel when required instead of horse hire. This matter will be examined, when you shall be advised.

OKEHAMPTON CONSOLS.—J. Richards, Sept. 16: Since the commencement of operations, the engine-shaft (12 ft. long, and 6 ft. wide, within timber) has been sunk altogether from surface 11 fms., or 6 fms. below adit lobby, for unwatering the same. The adit lobby has been brought up and secured by dry walling, over which is an arch of the same construction, which will effectually secure the ground, and enable us to load thereon refuse stuff from the underground workings without any additionel cost for surface damages. The wheel-pit has been excavated, and a very substantial water-wheel erected thereon, 40 ft. diameter, and 3 ft. wide, attached to which is a line of rods, 2½-in. superior iron, together with travelling and shaft-bobs, &c., the whole of which was set in motion on Aug. 30, in presence of the principal agents of the Devon Great Consols and other visitors, and the movements of the wheel and connections generally gave entire satisfaction. In addition to the work already enumerated, we have also cut a leat or water-course for conveying water to the machinery; its length being about 80 fms., it is of a sufficient size for carrying a good supply of water. We have also excavated ground for and erected capstan and sheavs, which enables us to command our underground pitwork, &c., on the most ecouomical scale. We have put in a 12-in. lift in the shaft for the time, which answers remarkably well, and which will in all probability serve us as a continual sinking-lift; of course we shall have a larger one as a permanent standing-lift, when occasion requires; of this, however, you shall be advised. We have erected a smiths' shop, which also answers the purpose of a changing-house for the men. The walls of the material-house are up, and the roof will be got on as early as possible. We are also progressing with the drawing machine-house, and when completed this machine will be attached to the same water-wheel, as it will effect a considerable saving in horse hire, &c. The engine-shaft is sinking in a congenial stratum of blue killas, interlined with small courses of elvan, the ground is now standing without timber, at the price of sinking is 18*l.* per fm. I propose to sink 30 fms. before cross-cutting to the lodes, which is, as you are already aware, a very fine-looking one, its size from wall to wall being full 10 ft. wide, its general character also is of the finest possible description being composed of first-rate gossan, with quartz and mundic; and I have, as a large shareholder, and your humble servant, no hesitation whatever in stating it as my belief that a fair and proper trial of this more than ordinarily tempting concern will be sure to be rewarded with the discovery of metallic mineral in abundance.

OKEL TOR.—Evan Hopkins, Sept. 11: On Sept. 11, 1850 (this day six years) I wrote a report on this mine, in which I stated that I considered that the main prospects of this sett depended on the lead lodes, and that the probable dip of the above of ore would be southward, under the River Tamar towards the marshes (see the rough section accompanying that report). I also recommended that the shaft should be sunk deep enough to drive the levels southward on the lead lode then seen in the adit. I am now happy to state that the lead lode has been intersected by means of

cross-cut east from the shaft in the 50, and several fms. driven thereon, at which point the lode looks exceedingly favourable for producing large quantities of lead ore southward, and at deeper levels. The matrix of the lode is composed of light decomposed clay-slate, intermixed with broken quartz, and strongly impregnated with clean sulphuret of lead, which doubtless will continue to improve in value as the levels are driven southward under the marshes. I recommend the 50 to be driven southward with vigour, and also northward in the 50 and 35 as far as the productive nature of the lode would warrant any prosecution in that direction. After the 50 has been driven southward, to prove that the lode is of sufficient value in the bottom of this level to justify deeper workings, the shaft should then be sunk to the 60 or 65, as may be deemed in the progress of the workings most advisable. In the meantime I would recommend a few fms. of the back of the lode in the 50 to be extracted, so as to show its general character and the quality of the lead lode. The 35, which has been driven southward, has not intersected the lead lode, it is therefore advisable to do so forthwith, so as to prepare to sink a winze to the 50 and ventilate the workings. The lode is easy for driving. With regard to the copper lodes I have still the same opinion as on the former occasion. They may be found productive of masses of mundic impregnated with copper ore near the intersection of the lead lode, but I have no favourable opinion of them as regular copper lodes; however, be this as it may, they should not be despised, and Capt. Collom was perfectly justified in prosecuting them eastward in the 20 and 35 whilst the indications continued favourable. There is another lead lode to the east, about 100 fms. from the present workings, where a small shaft may be sunk to prove the character of the copper lode eastward. Such a trial shaft would not only prove the value of the copper lode quicker and cheaper than by driving the levels below, but also prove the eastern lead lode, which in all probability will be found productive in lead ore. I am happy to state that I found the mine and machinery in very good order, and well arranged to carry on the mine extensively and economically. It is, therefore, to be hoped that the lead lode will be developed with vigour in the way proposed.

PEDN-AN-DREA.—J. Delbridge, J. Carpenter, Sept. 13: The sumpmen are engaged clearing and securing the engine-shaft below the 80. We have dropped the lift 7 fms. 3 ft. 6 in. below the 80, and hope on Monday to drop to the 90. We find the shaft in a good state, the lode in whole in the ends of the shaft, and, from the samples we have taken up this day, the lode yields stamping stuff for tin. In the 80, east of engine-shaft, on Martin's lode, the lode is yielding some good work for tin; it seems to be improving in the granite, and is now worth 6l. per fm. The 80 stopes, east of engine-shaft, are worth 10l. per fm. The 80 stopes, in the back of the end, are worth 15l. per fm. The 80 rise is not holed, and is unproductive. The 68 great deposit stopes are worth 20l. per fm. The 60 end west, on Martin's lode, is worth 5l. per fm. The 60 stopes, on Martin's lode, are worth 50l. per fm. The 60 rise, on Martin's lode, is worth 2l. per fm. The 55 stopes west, on Martin's lode, are worth 6l. per fm. The 55 stopes, on the engine lode, are worth 6l. per fm. The 55 stopes, at the sump whim-shaft, are worth 6l. per fm. Skimmer's lode is yielding a large quantity of tinstuff of the usual quality. We have sampled 17 tons 5 cwts. 0 qrs. 15 lbs. of black tin, and there remains unsampled about 3½ tons. No change to notice in any part of Bragg's. The machinery is working well. Every preparation is making for the skip. When the engine-shaft is drained to bottom, we shall commence to put in the timber for the skip-line, which will be in about 10 days from this time. On Wednesday next, we shall carry about 16 tons of black tin to the smelting-house, the yield of three weeks.

PEMBROKE AND EAST CRINNIS.—J. Dale, G. T. Truran: In the 162, 112, 100, 80, and 70 fm. level cross-cuts there is no alteration to notice; each are being driven with the utmost vigour. We have taken down the lode in the 70 end east, which is from 9 in. to 1 ft. wide, looking very kindly, and producing some tolerably good work for tin, intermixed with copper ore; the lode in the 70 west is at present unproductive. We have commenced sinking a winze in the bottom of the 50 to communicate with the level, in which the lode is about 20 in. wide, with good stones of ore. The tribute pitches are without alteration since last report.

PENHAUGER.—T. Grenfell, Sept. 17: The engine-shaft is sunk 5 fms. 1 ft. below the adit, a very small portion of the lode having been taken down during the past week; there is no alteration in it to notice since my last report; however, from the nature of the ground now in the bottom of the shaft, we quite expect the lode will soon be more productive in lead ore than it has been.

QUEEN OF DART.—P. Hawke, E. Sawdye, Sept. 10: We wrote the chairman some days since, informing him of the discovery made in the 10 driving west, where we have a most splendid course of ore, and the quality superior to any I have seen in the mine before. The tributers are sending up magnificent rocks of copper ore from the stopes in the 60. We are nearing the lode in the cross-cut from the 20, and hope to cut it in a few days, the indications are everything that can be wished for.

— P. Hawke, E. Sawdye, Sept. 13: The tribute pitches are without alteration since last reported. In the western end, at the 10, no lode taken down since the discovery has been made, but intend to do so next Monday. From the cross-cut to the east of cross-course at the 10 plenty of water still issues; the country shows spots of copper and lead; how near we are to the lode I am not prepared to say, as the distance of the heave has not been proved. We have the pleasure to inform you we have cut into the lode in the cross-cut in the 20 fm. level, 2 ft. wide; it has a strong champion-like appearance, composed of capel, very rank with mundic, producing good stones of copper ore, better than we could expect, knowing the shoot of ore at the 10 to be dipping east 2½ ft. in a fm. I think it will take a month to get under the regular run of ore ground. The surface work is progressing very satisfactorily, and the engine-wheel works well.

RHOSWYDOL AND BACHEIDDON.—E. Davies, Sept. 15: Our 70 fm. level looks well. The six men in the west foresield have been taking down the lode in the south side of the level; it is of immense size, and contains a good deal of lead ore. This party will have so far completed this work in a few days that they will resume driving the level further on the course of the lode, having taken it by six men to drive west, at 95s. per fm. The stope in the back of the 70, east side of winze, is as rich a stope as any we have ever worked in the mine. The lode taken down is upwards of 7 feet in width, and will average 2 tons per fm. I have set to four men to drive from the top of a stope in the back of the 70 into the winze, for opening more ground. The other stope in the 70, near the whim-shaft, produces some ore, but not so rich as the west end of the level. No change in the 70 south. The 50, driving west, is in a fine rich lode, improving as we drive. In the back of the 50 west we have two underhand stopes, one on each side of the western winze—one worked by six men, turning out good ore, and another by four men, doing the same. The 50, driving from whim-shaft towards the 30 west, produces a little ore. The stope in the back of this produces about 10 cwts. of ore per fm. In the back of the 40 the three stopes are producing ore, as before reported. No change in the 25 east, nor in the 20 south. I have not put an estimate of the yield of ore on some of the most important of the above works: we have not taken down all the ore, therefore the present estimate would be imperfect. The supply of broken stuff underground is now becoming extensive, and is also giving full employment to the dressing department. We are now increasing the force of this branch as much as we can. During the present day we shall be shipping by the *Elizabeth and Mary*.

RITTON CASTLE.—D. Thomas, Sept. 16: The 25 cross-cut is driven west from the engine-shaft 17 fms. 2 ft. towards the middle lode from the Bog Mine, and, according to my dialling, the lode is on surface 44 fms. north of shaft. We are cutting a water-course, to carry water to and from the dressing-floors. The ground east of shaft is yielding more ore than when you saw it; no alteration west.

— Sept. 18: We are putting a rise up through the ore from the 7½ fm. level west, so that we shall be able to stope this level both east and west. In the 18 fm. level east we are driving through the ore; both places look quite as well as last reported. We shall complete the water-course to-morrow, and shall commence dressing up the ore immediately.

SITHNEY WHEAL BULLER.—The north engine-shaft is sunk under the 70 fm level 9 fms. 3 ft.; this month it will be sunk as deep as Wheal Metal 80 fm. level. In the 70 fm. level west, on the north lode, the lode is 1 ft. wide, but of little value.—South Lode: In the 60 end, east from the cross-course, the ground is driven 6 ft. 6 in. The lode is at present small, in consequence of its now being near the cross-course; it is expected that it will soon form into the same character as it is in the level above. In the 50 east, on the south lode, the ground is favourable; the lode is producing good work for the stamps, with every promise of an improvement to a rich lode for tin; the tributers' pitches are much as last reported. The shaft under the 47 fm. level will be commenced on Monday or Tuesday next, when the whim will be in readiness for drawing.

SORTRIDGE AND BEDFORD.—T. Treweeke, Sept. 18: the lode in the adit level is about 2½ wide, composed of white iron, mundic, quartz, and flookan, with good stones of copper ore. The new shaft, on the copper lode, has been sunk 5 fms. 4 ft. below the 40; the lode at present is 5 feet wide, containing quartz, peach, mundic, capel, and flookan, with stones of copper ore intermixed throughout the lode.

SORTRIDGE CONSOLS.—J. Richards, Sept. 18: The sinking of Hitchins's engine-shaft progresses satisfactorily; the lode is composed of capel, mundic, quartz, and stones of rich ore. At Hitchins's engine-shaft, in the 50 west, the lode is 5 ft. wide, containing capel, quartz, mundic, prian, and ore interspersed throughout—very promising. In the 50 east the lode is still small (18 in. wide), and disordered. The lode in the stopes in the back of the 40 east is still worth 5 tons of rich ore per fathom. There is nothing new in any other part of the mine.

SOUTH BEDFORD CONSOLS.—J. Phillips, Jun., Sept. 17: The lode in the 62 west is 3 ft. wide, producing good stones of ore. In the 49 west the lode is 4 ft. wide, yielding 1 ton of ore per fm. The winze sinking in the bottom of this level is worth 1½ ton of ore per fm. The lode in Red Whim-shaft is 3 feet wide, producing good saving work. In the 36 west the lode is 2 ft. wide, producing saving work.

SOUTH CARN BREA.—T. Glanville, Sept. 16: Saturday last being our settling-day, we set the deep adit level cross-cut to drive south of the engine-shaft, by six men, at 13l. per fm.—driven in the past month 2 fms. 5 ft. The flat-rod shaft to sink under the 48, by nine men, at 23l. per fm. The 48 to drive west of the flat-rod shaft, by four men, at 5l. per fm., and 2s. 6d. tribute for saving the ore in carrying the level 7 ft. high; in the last 6 ft. driving the lode has produced about 1 ton of grey and black ore; in the present end the branch of ore is about 6 in. wide.

SOUTH CRENVER.—J. Delbridge, E. Chegwin, Sept. 13: At the engine-shaft the sumpmen are engaged cutting down the rise, and we have the steam whim kibble to the bottom of the shaft to draw up the stuff. In the 84, east of shaft, the lode is 1¼ foot wide, yielding stones of ore; the end is still in the slide, and the lode disordered. In the 74, east of Gore's, the lode is 6 to 9 in. wide, at present unproductive. We have driven on this end 19 fms. in the elvan course; the lode for that length has been productive, but at present it appears to be in the killas, and shortly we expect the lode to change, as did that in the 64 fm. level. In the winze sinking below the 74 the ground is favourable, lode 1½ ft. wide, yielding 1¼ ton of ore per fm. In the 64 east the lode is 20 in. wide, yielding 1 ton of ore per fm. In the 44 west the lode is 20 in. wide, yielding 1¼ ton of ore per fm. Our tribute pitches are without any change to notice.

SOUTH CUDDRA.—S. Truran, Sept. 17: The shaft will be communicated to the 40 in a few days. The 30 is opening out good ore ground, and the lode still improving as we drive west. The lode in the 20 west is composed of beautiful gossan and rich black ore. We shall soon communicate this level with the adit. The stopes are just as for some time past, producing good ore; we have about 14 tons at surface. We shall be able to put on more hands to stope the ore ground in a few weeks—at present there are only four men stoping.

SOUTH DOLCOATH AND CARNARTHEN CONSOLS.—Wm. Roberts, Sept. 16: In the 70 west the ground continues favourable, lode 3 ft. wide. Other bargains are much the same as last reported.

SOUTH WHEAL ROBERT.—Thos. Cocking, Sept. 18: We are satisfactorily progressing with the sinking of the trial shaft, as the ground at which still continues as it has hitherto been—favourable. There is no change to notice in either the size or character of the lode since last reported. In my last report, it should have been "to lo ige the stuff so as to be taken away with the whim-kibble," instead of "loosen;" and the shaft "set to the same pare," instead of "set at the same price."

TAMAR SILVER-LEAD.—T. Foot, Sept. 15: The lode in the end in the 215 is 2 ft. wide, producing 10 cwts. of lead ore per fm.; two stopes in the back of this level are producing—No. 1, 10 cwts.; No. 2, 9 cwts. of ore per fathom. There is no alteration in the 205 end since last reported on: the stopes in the back of this level are worth 6 cwts. of ore per fathom. The lode in the 190 end is 2 feet wide, yielding 7 cwts. of ore per fathom; three stopes in the back of this level are producing as follows—No. 1, 10 cwts.; No. 2, 9 cwts.; and No. 3, 7 cwts., of ore per fathom. The stopes in the back of the 175 level are worth 8 cwts. per fathom. Two stopes in the back of the 160 are yielding 6 cwts. of ore per fm. All other parts of the mine are without alteration.

TAVY CONSOLS.—R. Williams, Sept. 18: The prospects of this mine have undergone no material change during the last month, and the only feature worthy of notice is the increase of water in the cross-cut driving south in the 55 to intersect the Lady Bertha lode, which from this circumstance we believe to be near.

TEES SIDE.—R. Bray, Sept. 13: The stope under the 20 fm. level, east of Craig's rise, has been improving this last week; the vein is 5 to 6 inches wide of good lead, and will produce 2 tons per fm. No. 2 stope, under Craig's rise, is poor; vein rather disordered, with hard ground in hazle and plate beds. I think this will soon be cut through going east, and the vein become again productive. In the stope west from Craig's rise, in roof of the 24 fm. level, the vein will produce 1½ ton per fm. In the stopes west of engine-shaft the lode is 3 feet wide, and will produce 1½ ton of lead ore per fm. We sent off 3½ bings of ore by carrier this morning. The flooring-boards have arrived, and the carpenter will commence on Monday to lay the floors of the new shop. The masons have finished the erection of lodging-house, stables, &c.; on Monday, if the weather permit, they will commence building bob-pit at Metal Band. I have got an extra man to work at the surface-work at Metal Band, but I cannot take any men away from Providence without stopping the supply of ore. Eight tons of the ore sold are now ready to go to Alston.

TRELEIGH CONSOLS.—J. Prince, Sept. 13: A decided improvement has taken place in this mine, both in Carr's and Nicholson's department. The ground at Carr's engine-shaft is favourable for sinking—sunk this week 2½ feet, in which ground we have intersected a lode 18 in. wide, underlying 1 ft. in a fathom northerly. It consists of quartz and stones of yellow copper ore. I am not surprised to see this, because six lodes, extensively wrought on in Old North Downs, to the east of the county cross-course, must exist between Carr's and Nicholson's: we shall be able to report more fully on this lode next week. The lode in the 40 west is 18 in. wide, producing good saving work. At Nicholson's, at the engine-shaft, we have got through the slidey ground, under which the lode is 4 feet wide, with a leader of tin ore quite as good as that reported on in the bottom of the 10, and which was cut off by the slide; a most important discovery, because it shows that which we cut in the 10 was not a mere bunch. In about a fortnight from this time we shall ascertain its size, dip, bearing, and value, when a faithful report shall be forwarded to you: without a further development, I can say no more about it at present. The lode in the 10 west is 2 feet wide, worth 10l. per fm. for tin. The lode in the 10 fm. level east produces copper ore, which will about pay for driving the end. Several cross branches have been met with, but the main cross-course we have not yet reached.

UNION TIN.—J. Webb, Sept. 17: The new east engine-shaft is completed to the bottom of the old men's working (10 fms.); the water is now taken out of the old mine, and the levels being cleared we shall in a few days be enabled to examine the same. We are now in a position to open out an extensive mine in this part of the sett, and I believe a profitable one. The 30 fm. level, in the west workings, is not yielding much tin at present. The 20, driving east, is looking very promising. The stopes in the back of the 20 are becoming exhausted, and the 30 has not come forward as yet to supply them. I am satisfied that if we exercise patience we shall open out a good mining property.

UNITED MINES (TAVISTOCK).—Capt. Rowse, Sept. 17: There is no alteration in the value of the lode at the shaft; the ground is harder, which is a good indication. The north lode east is worth 6l. per fm.; the same lode west is worth 8l. per fm. The south lode in the end driving west is worth 4l. per fm. In the winze sinking under the 18 fm. level no lode has been taken down as yet.

VALE OF TOWY.—S. Thomas, T. Harvey, S. Harper, Sept. 16: Clay's engine-shaft is sunk 5 fms. 5 ft. under the 40, and ground improving. In the 40, driving north, the lode is 2 ft. wide, as last reported, producing 16 cwts. of lead per fm.; in the same level, driving south of Field's shaft, the lode continues large, and producing good lead, but not sufficient to value. At Bonville's shaft, sinking under the 30, ground as last reported; in the winze sinking under the 30, south of said shaft, the lode is 18 in. wide, producing 10 cwts. of lead per fm. In driving east on the cross lode in the 20, from Bonville's shaft, the lode is 18 in. wide, composed of spar and flookan. In the 20, driving south of Field's shaft, the lode is 15 in. wide, mixed with lead.

WELSH POTOSI.—R. Dunn, T. Goldsworthy, Sept. 17: Esgair-hir: No. 3 stope, in the back of adit, west of footway shaft, yields 1 ton of lead ore per fm. The stope in the bottom of footway shaft yields 1½ ton of ore per fm. No. 5 stope, in the back of the 10, west of same shaft, yields 1 ton of ore per fm. No. 6 and 7 stopes, in back of the same level, yield each 1½ ton of ore per fm. No. 8 stope, in the back of the 10, west of old engine-shaft, is worth 1 ton of ore per fm. Nos. 9 and 10 stopes, in the bottom of the 10, west of footway shaft, each yield 1½ ton of ore per fm. No. 2 winze, in the 10, west of old engine-shaft, is sinking satisfactorily.—Esgair-ffraith: The pitches east and west of shaft are the same as last reported.—Middleton Mines: The lode in the shallow adit level at Llwynadda yields 10 cwts. of ore per fm., and the ground continues favourable for driving. Our engines are progressing slowly.

WEST COLLACOMBE.—H. Rodda, Sept. 18: At Bridgman's engine-shaft, the lode in the stopes in the back of the 52 east is without alteration since last reported on. The rise in the back of the 42 is communicated with the winze sinking in the bottom of the 27, which will now enable us to drive both the 42 and 27 fms. levels. We have resumed driving the 42 east, where the lode is from 16 to 18 in. wide, composed of capel, jack, spar, and occasionally rich stones of copper ore, altogether very promising. At the new eastern shaft we have set another 10 fms. to sink, also to divide and case the shaft, put in footway, and make all complete to the 20, for 8l. per fm. We weighed and shipped at Morwellham, on the 16th, 100 tons of black jack, and we are now getting on with the dressing up of the copper ore for the next sampling with all possible dispatch.

WEST SORTRIDGE CONSOLS.—J. Pryor, Sept. 17: We have not as yet cut the lode in the 20, but expect to do so daily; the lode in the winze is now about 2 ft. wide, composed of mundic and capel. The lode in the 10, driving east, is improving in size, being now about 1 ft. wide, composed of capel and spots of copper ore. Jury's copper lode is not quite so large as it has been.

WHEAL AGAR.—Wm. Roberts, Sept. 16: In the 40, east of Winstow shaft, the lode is 1¼ ft. wide, producing stones of ore; in the same level, west of ditto, the lode is 2 ft. wide, with stones of ore. In the 40, west from Boundary shaft, the lode is 4 ft. wide, worth 3½ tons of ore per fm.

WHEAL ARTHUR.—T. Carpenter, Sept. 15: Watson's Lode: The lode in the 20 west, below adit, is 3 feet wide, good stamps work for tin. The lode in Wilton's stope, in back of the 30 west (from surface), is 5 feet wide, worth 11l. per fathom for tin.—Old Lode: The lode in Palmer's stope, in the back of the 20 east, below adit, is 6 ft. wide, yielding 12l. worth of tin per fathom.—North Lode: The lode in the 20, below adit, is 4 feet wide, composed of mundic, spar, and copper ore. We have driven the 10 below adit north 2 fms., but not yet reached the lode; we have every indication of cutting the lode shortly. The lode in the adit level west is 5 feet wide, worth 8l. per fm. The lode in Ivey's stope, in the back of the 35 west, is 4 feet wide, worth 20l. per fathom. The lode in the 20 west is 3 feet wide, composed of mundic, spar, peach, and copper ore. The lode in the adit level east, in the eastern mine, is very much improved these last few days. I have every reason to believe we shall meet with a course of ore in this level very shortly.

WHEAL CREBOR.—J. Wolferstan, Sept. 14: I beg to hand you the cost-sheet for August, and to inform you that the pay-day will be on Saturday next, the 20th inst. During the past week the men broke some fine stones of ore from the lode in the 12 end west, and we hoped to have had a good report to make of it, but I am sorry to say it is not looking so well now.

— J. Gifford, September 15: In the 66 fathom level end, east of Rundle's engine-shaft, the lode is 3 feet wide, composed of capel and mundic, with strings of copper ore intermixed throughout, but not enough to value. In the same level, west of shaft, the tributers are still desuing the lode. In the 12, west of said shaft, the lode is not so good as last reported, but still retains its former size and kindly appearance. All other parts of the mine are without alteration.

WHEAL EDWARD.—T. Carpenter, M. H. East: On north lode, the ground in the 64 east is changed for the better; we shall cut through the lode by the end of this week. In the 54 east we have put the men to drive north to cut part of the lode which is now standing in that direction. The lode in the 41 east is 2 feet wide, composed of spar, mundic, capel, and copper ore; this level is going on favourably towards Arthur's 20.

WHEAL GRYLLS.—M. White, S. Osborne, Sept. 6: Since the commencement of this mine, January, 1856, we have cleared up two shafts from surface to the adit on the north lode, and one on the south lode, which is 10 fms. deep. Since which we have driven the 10 east and west of north shaft 33 fms.; from this ground we have sold upwards of 300l. worth of tin; the lode is from 1 to 2 feet wide; the east end is near the boundary; the lode in the western end is at this time 1 foot wide, tinny, but not of sufficient quantity to value. We have driven a 6 fm. level west of shaft, on the south lode, 14 fms., which has yielded fair quality tinstuff, and is improving as it is being driven west. Report speaks of a good bunch of tin some few fathoms before this end, which we hope soon to see; on the whole, this eastern ground is opening very fair. Our operations in the western ground is the driving of the deep adit level west on the engine lode; here we have driven through a quarry 8 fms. 4 feet, and got into killas; the lode at this point is quite in a disordered state; this we think is caused by the elvans, and as the driving gets from it we expect a favourable change. We have yet on this lode nearly half a mile in length to the west boundary of the sett, which we think is a promising piece of mineral ground. We sampled on the 5th inst. 276½ barrows for 49l. 14s. 3d., which is not included in the foregoing amount, and Aug. 11, 24l. 7s. 4d.

WHEAL KITTY (ST. AGNES).—W. Thomas, Sept. 13: In the engine-shaft sinking below the 62 the lode is 20 in. wide, worth 35l. per fm. No lode taken down in Holgate's shaft since my last report; the men have been forcing the skip road to the 65, and cutting plat in order to sink the shaft. In the 65, driving west of Holgate's shaft, the lode is 4 ft. wide, worth 15l. per fm. In the 54, driving west of Holgate's shaft, the lode is 2½ ft. wide, worth 30l. per fm. In the 34, driving east of the cross-cut, on the new lode, the lode is 2 ft. wide, worth 5l. per fm. In the 62, driving east of engine-shaft, south on the gossan, the lode is 2 ft. wide, worth 5l. per fm. In the 54, driving east of engine-shaft, the lode is 2 ft. wide, saving work for stamping; in the rise over the 54 the lode is much improved. In the 44, driving east of engine-shaft, the lode is 3 ft. wide, worth 8l. per fm. In the 34, driving east of Sunny Corner shaft, the lode is 2½ feet wide, worth 6l. per fm. Our tribute department continues to look well throughout the mine.

WHEAL LANGFORD.—J. Nance, W. Knott: We have no alteration to report respecting the lode in the bottom of the shaft, or in the stope in the back of the 28. The 35 has been cleared 12 fms. beyond Malachy's shaft, and have cut through the copper lode at that point. It is about 5 feet in width, and will yield about 2 tons of copper ore per fm., of moderate quality, and very kindly in appearance. The parcel of silver-lead ore, computed 10 tons, has been sampled to-day.

WHEAL MAUDLIN.—W. Tregay, Sept. 13: The lode in adit at Coomb produces a little scattered mundic, with now and then a few specks of ore. The lode in Trial shaft appears to be making regular again, composed chiefly of quartz, and sometimes spots of ore.

WHEAL NELSON.—W. C. Vivian, Sept. 17: The water has been in the 60, in consequence of two breakages to the engine; this level is, however, now again in fork. In the 44 east the lode is much the same as when last reported on; and in the same level west the lode continues to produce stones of yellow copper ore. We have commenced stoping the bottom of the 44, and find the lode of much the same character as it was in the level—that is, large, with branches of copper and tin throughout. We have been hindered in this operation by the lets to the engine. The lode in the 32 east has still further improved since my last report, and is now producing good stones of grey copper ore.

WHEAL SIDNEY (PLYMPTON).—W. Edwards, Sept. 15: Since our last general meeting, on Aug. 27, we have effected the communication between Nos. 3 and 4 levels, which has ventilated this part of the mine, and enabled us to resume driving west in the latter, where the lode is much improved, being now 3 ft. wide, with rich work for tin in places, the general indications being highly favourable. The lode in No. 3 level west is about 2 ft. wide, and still giving good work for tin, the indications here also being most satisfactory. The lode in No. 2 level is without alteration, the same may be said of No. 1 level, and the stopes throughout continue to produce work of similar quality for some time past. The tribute department has rather improved. The water in Nos. 3 and 4 levels having lately increased, we have applied a 6-inch lift by the side of the 10 in the bottom, which has fully answered the intended purpose. The machinery throughout continues to work well. Our last sale of tin, estimated at 8 tons, and to realise 612l., weighed 8 tons 3 cwts. 6 lbs. (including 4 cwts. 21 lbs. of second quality), realised 618l. 17s. 2d. Our water launders have, since the last meeting, been put into substantial repair, and will now probably last some years. The surface work and other departments of the mine are progressing as favourably as our present rather short supply of stamping water will admit.

WHEAL TALLACK (ST. AGNES).—Capt. Wm. Kitto, Sept. 11, reports as follows: Agreeable to your wish, I have inspected this mine. There has been a shaft sunk from surface, and communicated to the adit level, which is 13 fms. from surface, and now sinking below the adit by six men, at 5l. per fm.; the lode is 1 ft. wide, composed of jack, mundic, spar, tin, &c., having a kindly appearance. The adit end is extended about 14 fms. east of shaft, on the course of the lode, which will average about 1 ft. wide, composed of jack, spar, mundic, with stones of tin and copper ore, at present not driving,—if drove, at 3l. per fm. There is about 10 fms. of ground opened west of the shaft at the adit level, the lode of a similar character as east, which is about 24 fms. in length. I think if this lode is wrought upon in depth it will be a copper lode; the stratum is soft light killas, and it is a good speculation. I should recommend to cut abroad the present level, and make it 7 ft. high and 3½ ft. wide, and drive the adit east on the course of the lode to see more of its character, which can be done at a little expense. I would also recommend to sink the shaft 12 ft. long and 6 ft. wide, if found necessary to fix an engine upon the same shaft, which can be done at about one-third additional expense. I cannot say anything of the south lode, because it is not cleared out at the adit level.

WHEAL TEHIDY.—D. Lanksbury, Sept. 17: In the 90, driving west of the diagonal shaft, the lode is 2 feet wide, worth 1½ ton of ore per fm., and improving as we open on it. In the 40, driving east from the western shaft, a north and south branch has intersected the lode, and at present it is disordered; I have little doubt but a good bunch of ore is near us. At the engine-shaft, sinking below the 50, the ground is favourable. At Bull's shaft the water is sunk under the 40, which level we are clearing of the stuff left from the former working. We hope to sample next week about 50 tons of ore.

WHEAL TREBARVAH.—W. Johns, Sept. 16: The lode in the 60 fm. level, east of flat-rod shaft, is about 1 foot wide, but not yielding sufficient ore to value. The lode in the 50, east of the same shaft, is still split in two branches; in about 6 feet driving we expect these branches will form a junction. Although at present poor for copper, yet these ends are letting out an increase of water, and showing favourable indications as we are approaching the ore ground driven through in the level above. The ground in the bottom of Michell's shaft, sinking below the surface, is a little eased, and we are pushing on with all speed to reach the 20. I am glad to say the pitches the past week about this point are improved, and all other pitches and working operations continue without alteration.

WHEAL TRELAWNY.—W. Jenkin, W. Bryant, Sept. 18: Smith's shaftmen have completed cutting plat in the 132; they are now engaged in putting in penthouse, and will, in a few days, commence the cross-cut towards the lode. The lode in the 120 north is 1 ft. wide, worth 6l. per fm.; in the same level south it is 2 feet wide, worth 6l. per fm. In the 108 south it is 2 feet wide, worth 12l. per fm. In the 108, north of Chippendale's, it is 2½ ft. wide, worth 14l. per fm. In the 98 north it is at present shall and poor.—South Mine: Trelawny's shaftmen are still engaged in cutting a plat in the 142. The lode in the 130 south is 2 ft. wide, worth 10l. per fm.; in the same level north it is 1½ ft. wide, composed of fluor-spar, spotted with lead ore. In the 120 south it is 2 ft. wide, worth 10l. per fm.

WHEAL TREVELYAN.—J. D. Osborn, B. Gundry, Sept. 13: Watson's engine-shaft is now down 7 fms. below the 30, in a congenial blue killas, and in about a month we hope to be down to the 40. In the 30 east, on Park lode, the men are taking down the lode, which is producing good stones of grey ore, and is looking more promising than when last taken down. The winze sinking below the 15 is now down 2 fms., where the lode is yielding good stones of ore.

WHEAL WREY CONSOLS.—P. Clymo, jun., W. Hancock, P. Roskilly, Sept. 18: The engine-shaft is sunk 9 fms. 2 ft. under the 44. The lode in the 44 north is 3 feet wide, producing 14 cwts. of lead per fm.; in the same level south it is 2½ feet wide, producing ¾ ton of lead per fm. In the 33 north it is 3 ft. wide, producing 12 cwts. of lead per fm.; in the same level south it is 1½ ft. wide, producing 8 cwts. of lead per fm. In the 23 north the lode is much the same as last reported on. The north shaft is sunk 5 fathoms under the 12. The stopes are producing much as usual. We shall sample, on Saturday next, two parcels of lead ore; No. 1, computed 77 tons; No. 2, 46 tons, for sale on the 29th inst.

WHEAL ZION.—J. T. Phillips, Sept. 17: In the 80, driving east, we have a small branch of a lode near the flookan, producing stones of copper ore. In the 65 end west the lode is nearly 3 ft. wide, composed of spar, peach, and mundic; the eastern end is without change. In the 50 east we are cross-cutting through the lode, which is 8 ft. wide, a strong, fine-looking lode, producing stones of copper ores. The 50 west is progressing favourably. In the 48 west we are not yet through the cross-course. The rise in the back of the 30 fm. level, 40 fms. west of Lemon's shaft, is producing stones of copper ore; we expect the lode to improve here.

WILLOW BANK.—J. Sanders, Sept. 13: The 17 east from western engine-shaft is extended about 9 ft. since setting day, which is at present hard for driving, and still unproductive; the 17, west from this shaft, is extended about 6 ft. since setting day, which is at present hard, with a great quantity of water issuing from it, and is very troublesome for driving; the lode in this end has a very promising appearance, although unproductive at present. At the eastern engine-shaft the men are cutting a cistern plat, where we shall fix the lift in one end of the shaft, which will be out of the way of the kibble working in the shaft, and at any future time when you think proper to sink the shaft, the lift will be in its proper place for sinking.

WITHIEL UNITED.—H. Grose, Sept. 9: The ground at Fielding's, or new shaft, is improved since I last wrote, and is very congenial for mineral, being a light-blue killas and highly mineralised, containing large portions of mundic and stains of copper; we shall commence to case and divide this shaft to-morrow, to get whim-kibbles to draw the stuff, which will be more speedy and cheaper than manual labour; this casing and dividing will be completed by Saturday, and the horse-whim in readiness to work, and if the ground continues as at present we shall get this shaft to the adit level by the end of this month. The stopes in the back of the 10 are greatly improved in the last few days, the lode being at present 10 ft. wide, worth 26 tons of ore per fm., all rock ore, and of the finest quality, but is very hard for breaking. The lode in the back of the adit level is 4 ft. 6 in. wide, worth 12 tons of ore per fm., good quality ore; our daily average of ore from these stopes is about 7 tons per day, which we are sending to the shipping port, and shall send it off the early part of next week. At Tremoor, or the south mine, the men have cleared out the old adit east of shaft, put in sollar, ladder road, and fixed tackle to draw the stuff: they have commenced to cross cut to the south lode, which is about 2 fms. from the present adit. I enclose you an assay of the gossan and carbonate of copper from the back of these lodes at surface—viz., 9¾ per cent., which at present standard is worth about 8l. 10s. per ton. I intend to put a man or two to work on this, when no doubt some tons may be broken and got ready for the market.

WOOD MINE.—S. Cock, Sept. 17: The plat, penthouse, &c., are completed, and the men have resumed sinking the shaft below the 14, at 27l. per fathom; stent 9 ft. for bearers and cistern, and cut down sufficient ground in the south end of the shaft for cistern plat. The 14 end north is also resumed driving, by six men; the lode is at present disordered by a mundic ring, but not without lead. In the 14 end the lode is spotted with lead, and water issuing strong. We anticipate an improvement here shortly. There is no alteration in the winze south since my last.

YEOLAND CONSOLS.—R. Williams, Sept. 18: The prospects of this mine are still encouraging, and continue gradually to improve. The shaft is sunk below the 72 about 2 fms., the lode in which is large and tinny. The 72 is driven east on the course of the lode about 4 fms., and the lode is of a remunerative quality—driving by four men, at 60s. per fm. The 60 is being driven east by four men at 50s. per fm., and the lode on the north part is of good quality, this point has improved since my last report; the stope in back of the 60 is of good quality, stoping at 6s. per fm. by four men. On the whole, we are doing much better than for a considerable time past, and our position as regards supply for the stamps was never better than at present, which we are likely to maintain by continuing to sink the shaft as at present.

RATING OF MINES.—At St. Just vestry meeting, an objection to the rating to the poor was taken by Mr. J. Boyns, purser of Wheal Owles, on the ground that the best dividend mine in St. Just—Botallack—was exempted from poor rates, whilst all the others were contributing their quota. For the purpose of trying the case, Botallack Mine was placed on the rate.

MINING IN SPAIN.—A circular of the Ministers directs that the working of the mines shall everywhere be pushed forward with vigour. The progress of this branch of industry in the last 10 years has been very extraordinary. From the official report it appears that in the district of Carthagena the produce was in 1842 as follows:—Lead, 370 quintals; silver, 144 marcs. In 1855 the amount was—lead, 375,394 qtls. (a thousand times greater than in 1842); and silver, 6733 marcs.

IRON ORE FROM LAKE CHAMPLAIN.—It will no doubt be interesting to the numerous readers of your scientific Journal to know that an iron ore is now coming to Britain from Lake Champlain, which, tested by Mr. Abel, chemist to the War Department, Woolwich, gives—Silica, 3·68; protoxide of iron, 30 15; sesquioxide of iron, 65·06; phosphoric acid, 0·30; lime, 0·60; water and loss, 0 21; manganese, trace; (no sulphur detected). Thus the ore is rich and of remarkable purity, almost without any earthy matter, and entirely free from sulphur; and consisting chiefly of crystals of magnetic oxide of iron, it is easily melted and separated, and is very uniform in quality, and reported by Prof. Ansted, and other eminent chemists, as well adapted for mixing. Besides, its constituents, silica and manganese, assimilate it much to the famous Swedish iron; and being very ductile, it is expected to be specially adapted to the manufacture of steel, boiler-plates, &c. As it can be brought over at a moderate freight, it may be extensively introduced.—THOS. R. ARNOTT: *Liverpool.—Practical Mechanics' Journal.*

SUPERHEATING STEAM.—The Engineer Department of Woolwich Dockyard having been instructed by the Lords of the Admiralty to ascertain the specific advantages and economy to be obtained in the event of their decision to adopt Mr. Wethered's system of superheating steam, Mr. Partridge, assistant-chief-engineer, was deputed to accompany Mr. Wethered during the late experimental trip, and to make a careful report on the working of the apparatus. The pipes have been removed, and the *Dee* dispatched under ordinary steam. Mr. Ward, inspector of machinery afloat, has taken passage, in order to compare the rate of speed and the consumption of fuel, &c., of the experimental voyage with the present one.

WELDING IRON.—A series of experiments have been carried on at the Victoria Iron-Works, Greenwich, to test the value of the invention of Mr. Bertram (recently a foreman in the Woolwich Dockyard), for superseding the rivetting of iron by the welding process. Several eminent practical men connected with iron-works in the North of England were present, and although the first trials were not satisfactory, subsequent experiments proved the importance of the invention. On the application of a powerful test, the solid iron plate gave way, but the junction effected by the welding process remained intact.

MADAME TUSSAUD'S EXHIBITION.—A portrait model of His Majesty the King of Sweden has just been completed, and placed in the royal group of this well-known exhibition. His Majesty is represented in a military costume, decorated with numerous orders of merit. The likeness is considered excellent, and the figure is most life-like and admirably constructed.

COST-BOOK COMPANIES, AND THE NEW JOINT-STOCK ACT.

SIR,—The Lords of the Committee of Privy Council for Trade have returned the following reply to the applications from two cost-book companies, whose operations are beyond the specified limits of Cornwall and Devon:

Office of Committee of Privy Council for Trade, Whitehall, Sept. 16.

SIR,—In reply to your letter of the 6th inst., asking for information relative to the operation of the new Joint-Stock Act (19 and 20 Vic., cap. 47), as regards the Coed Mawr Pool and the Dalrhiw Mining Companies, carried on under the Cost-book System, I am directed by the Lords of the Committee of Privy Council for Trade to acquaint you that my lords cannot undertake to give an opinion on the questions raised, and can only refer the companies to their legal adviser.—T. H. FARRER.

The inference, therefore, is that, from a defect in the provisions of the Act, the intentions of its framers to confine the legal recognition of the Cost-book System to the Stannaries district (Devon and Cornwall), as testified by the special exception of those counties, are rendered inoperative from the omission of any specific clause declaring it to be imperative upon all other companies to register. These companies are, therefore, cast upon the stream, subjected to the hazards of a common partnership, rendered doubly hazardous by the abolition of the specific exception contained in the Joint-Stock Act of 1844, under which such companies have been recognised by various decisions in the courts of law.

It should be borne in mind that a common partnership in an unregistered company of more than 20 persons is exposed to this danger—viz., that any number of the partners may acquit themselves of their partnership liability by a notice or protest, thus leaving the risk of an unprofitable enterprise to be borne by those who have something to lose.

Such a state of things cannot, of course, endure for any length of time. No doubt the Act will be amended during the next session, but in these days of defective law-making and law-mending, where is the security for the hundred or more companies now working on ground situated beyond the bounds of the two western countries? What probability is there that confidence will be ensured to such companies, unless they determine of their own free will to organise at once under the new law, such as it is?

Surely, there can be no legal difficulty owing merely to their non-recognition by the Act. Is it not in the power of a majority of the shareholders to promptly determine the matter by a resolution to register, whether with or without dissentients? The doubt expressed by a solicitor at a late meeting of the above companies was not avowed as a recognised difficulty, but only as a subject for enquiry; and it would be well if several of the leading companies so situated would combine together, to obtain the first legal advice on this point, since the Board of Trade decline to give any opinion on the subject.—*Cannon-street, Sept.* 18. G. I. S.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

THE WHEAL ALFRED DISTRICT.—It is truly gratifying to learn that a district, once so celebrated as the Old Wheal Alfred was for its immense deposits of mineral wealth, is again about to resume its character among the great and productive ones in the county of Cornwall, by a most important discovery of a rich lode in the western part of that mine, now called the Great Wheal Alfred,—indeed, the channel of ground from Hayle to the Mount's Bay has in times past been celebrated for the immense deposits of very rich copper ore various mines in that locality during the last century have yielded, producing several millions of money. Some of the mines near Marazion, such as Old Wheal Fortune and others, have yielded upwards of a million sterling value in copper ore each. I understand there is a valuable discovery near Marazion, adjoining Old Wheal Neptune, in Perranuthnoe, on which operations were commenced in the spring of this year. So soon as the machinery is erected, large returns may be expected. The ore, as is usual in that district, is of the richest quality.—S. JAGO: *Camborne, Sept.* 15.

At the FOX TOR ALVENNY TIN MINE, two or three shafts have been sunk about 10 fms. deep, and a level driven a short distance, from which about 5000*l.* worth of tin has been sold, but want of capital and the requisite pumping machinery caused a premature abandonment of this undoubtedly rich tin mine. There is a 50 ft. diameter water-wheel on the mine, which is adapted for stamping, drawing, &c., besides the necessary buildings; and all that is wanted is a good pumping-engine, of from 50 to 60-in. cylinder, which may be purchased and erected for 1800*l.*, including building, after which 200*l.* per month will be ample to fully prosecute the underground operations in a proper manner; and it is considered certain that monthly sales can be effected of tin of superior quality. A limited capital is required, and the price of black tin is a sufficient inducement to work this mine vigorously.

WEST CRINNIS AND REGENT UNITED MINES.—We last week briefly adverted to the position of these mines. At a time like the present, when so many schemes of a questionable description are brought before the public, we have great pleasure in calling the attention of our readers to this undertaking, as possessing all the elements of success. The Regent main lode, which passes through the entire width of the two mines, gave good profits to the last adventurers. Bell and Kemp's lodes, which will both form junctions with the Regent in depth, have only been worked to the 40, and there produced considerable returns of rich ore.

NORTH WHEAL GILBERT—Mr. Geo. Henwood, the well-known mining geologist, who has been inspecting several mines in this locality during the last week, gave our adit and lodes a thorough examination. His opinion is, that we have all the elements of a good mine, the ground throughout being highly mineralised, the lodes masterly, and the cross-courses traversing the sett, likely to make them productive, as has been proved in our south lode. By reference to the Ticketing Papers, it will be seen a small sampling of ore has been made from above the adit level.

QUEEN OF DART MINE.—Among our reports, in this week's Journal, will be found the discovery of the lode in the 20 fm. level at this mine, setting at rest any doubt as to the continuity of lodes in depth in this district, as has been asserted. It will be remembered that Capt. Ennor, in his report of this mine, published in our Journal at the time, stated that the next level (the mine was then at the 10 fm.) would decide whether she would become a great and lasting mine: the problem, we trust, is solved to the satisfaction of all parties, and to the advantage of all young mines in the neighbourhood.

TREVARNE CONSOLS.—These mines, which are situated near Padstow, on the property of Mr. Tom, are about being worked by some adventurers residing at Devonport. It is stated that there are three copper and five lead lodes, the latter being rich in silver; one of the veins is grey copper, the other yellow pyrites, of good quality. It will be necessary to sink an engine-shaft to cut the lodes at a depth of 40 fms. An old cross-cut bearing lead was discovered by Mr. Tom, the vein carrying about an inch of lead; it has been driven on for 6 ft., and has now increased to 6 in., and the improvement is likely to continue, as it is going towards the main lodes. Great expectations of the success of the mine are entertained at Padstow and its vicinity.

RITTON CASTLE MINE.—The recent discoveries at this mine are attended with considerable interest, from the fact that it is now indisputably proved that the reports current in the neighbourhood of the sudden submersion of the mine when worked by the Bog Company are founded on fact. It would appear, by the report just issued to the shareholders, that the communication gained by holing the workings from the 25 into the 18 of the old company, let loose the water from that and the other workings, and exposed a large quantity of ore standing, and also brought to light the causes of the stoppage of the mine. The Bog shaft was sunk 18 fms., and levels driven east and west upon the course of the wheel-pit (now called No. 3) lode, from which large sales of ore were made; this work was carried on by means of a water-wheel supplied from a large reservoir formed about 300 yards north of the valley, and which, from the extent of the workings, would appear to have fully answered its requirements. Report says, that the water collected in this reservoir at length permeated through the clay until it reached one of the beds of shale (common in this neighbourhood), and burst suddenly into the mine, about 18 fathoms west of the shaft, and caused its sudden suspension. This report is somewhat borne out by the mining implements, loose pumps, and other materials which have been taken out from the ends and old workings during the last fortnight, together with the remnants of a forcing machine, which had been unsuccessfully applied in the endeavour to overcome this calamity. All this has now been remedied by the connection of the workings of the present company from a deeper point of the mine, and it would appear, by the report of Capt. James Roach, of Bryntail, that the perseverance of the adventurers is at length rewarded in the possession of a valuable property. It is proposed now to place the affairs of the company under the Joint-Stock Act, 1856, with limited liability; to increase the shares from 4000, upon which 27*s.* per share has been paid, to 5000 shares, of 2*l.* each, which extra capital is to be applied to the purchase and erection of a more powerful steam-engine, the mine being free of debt; meanwhile the portable engine now on the mine will be removed to the Bog shaft, to enable those workings to be fully and more conveniently wrought. About 5 tons of good lead ore were raised, by six men, in ten days, on a tribute bargain.

SOUTH HERLAND AND RELISTIAN UNITED.—A company has been formed for working these mines upon the Cost-Book System, in 1000 shares of 2*l.* per share, to be paid on appropriation. The committee of management are Messrs. W. Harvey, of Hayle; J. B. Coulson, Penzance; J. Rosewarne, Nanspusha, Hayle; R. H. Bamfield, St. Ives; and James Hollow, Lelant. Mr. Hollow being appointed purser. The mine is situated in the parish of Gwinear, and comprises the old Relistian Mines, and the ground west to the Alfred Consols Mines, running parallel with and adjoining the Herland Mines. It is well known for its great productiveness during the former workings, having produced immense quantities both of tin and copper ores. The ancients worked the south lode very extensively for tin, large quantities of which were at first broken almost at surface, and the lode continued rich to a great depth. The north lode produced principally copper ore, and that to the amount of about 150,000*l.* It is intended to work the western part of the sett, through which run the whole of the old Relistian and Rosewarne lodes, and which is traversed by two elvan courses and two cross lodes. Immediately adjoining this mine, on the north, are the celebrated Herland Mines, which at different workings have produced no less than 400,000*l.* worth of copper, and 50,000*l.* worth of silver. Directly westward are the well-known Alfred Consols Mines, which have given dividends amounting to about 75,000*l.*, and are still making profits. In the explorations already made six east and west lodes have been cut within a distance of 100 fms.; on the backs of four of these very rich tinstuff has been broken, some of it in fine crystals, and as rich copper lodes in this district generally give tin on the backs, this is considered a very good indication. The mine is well situated, near Hayle, from whence every kind of material can be procured, and at very low rates of carriage. Capts. John and Joseph Vivian, T. Hosking and W. Hollow, jun., in reporting upon the property, say that they had a very high opinion of the sett being second to none in the locality, and if worked well could not fail on a moderate outlay to pay well. The district is, in fact, very rich, and from the promising indications they had no doubt of its proving a rich mine. Mr. George Henwood, of Leeds, says, "I can corroborate the whole of the reports; it is a first-rate thing." We have seen a plan of the sett and list of the shareholders, and find many of the most influential Cornish and other capitalists amongst them, and congratulate Mr. Hollow on his success in introducing so *bona fide* a speculation, and one possessing so many elements of success, to the public.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET, London, Sept. 19, 1856.

COPPER.	£. s. d.
Copper wire .....p. lb.	0 1 1½–0 1 2
ditto tubes ..... ,,	0 1 1½–0 1 3
Sheathing and bolts.. ,,	0 1 0– —
Bottoms ..... ,,	0 1 ½–0 1 1
Old (Exchange) ..... ,,	0 0 10½
Best selected.....p. ton	110 10 0
Tough cake ..... ,,	107 10 0– —
Tile ..... ,,	107 10 0– —
South American (nom.),	100 0 0

IRON.	per Ton.
Bars, Welsh, in London .	9 0 0– —
Ditto, to arrive	8 10 0– 8 12 6
Nail rods	9 10 0– —
,, Stafford. in London	9 15 0–10 15 0
Bars ditto	9 2 6–10 10 0
Hoops ditto	10 5 0–11 10 0
Sheets, single	11 5 0–13 0 0
Pig, No. 1, in Wales ...	4 10 0– 5 0 0
Refined metal, ditto.....	5 10 0– 5 15 0
Bars, common, ditto ...	7 12 6– 7 15 0
Ditto, railway, ditto ...	7 10 0– 7 15 0
ditto, Swed. in Lon.....	14 0 0–16 10 0
in stock to arrive	15 0 0–15 10 0
Pig, No. 1, in Clyde ...	3 14 0– —
Ditto, in Tyne and Tees.	3 11 0– 3 15 0
Ditto, forge	3 10 0– —
Staffordshire Forge Pig.	4 15 0– 5 0 0
Welsh Forge Pig	3 15 0– 4 0 0

LEAD.	
English Pig	23 15 0–24 10 0
Ditto sheet	24 15 0–25 10 0
Ditto red lead.....	26 0 0–27 0 0
Ditto white.....	27 0 0–30 0 0
Ditto patent shot	27 0 0–28 10 0
Spanish, in bond	23 0 0– —
American.....	none.

FOREIGN STEEL.	
Swedish, in kegs	21 0 0– —
,, to arrive	19 10 0–21 0 0
Ditto, in faggots	22 0 0– —
English, Spring	18 0 0–23 0 0

BRASS (sheets) .....p. lb.	10d.–10½d.
Wire	10d.
Tubes	12d.–14d.
QUICKSILVER .....p. lb.	1s 9d.

SPELTER.	Per Ton.
Foreign	28 0 0– —
To arrive.....	28 0 0– —

ZINC.	
In sheets.....	35 0 0– —

TIN.	
English, blocks.....131	0 0– —
Ditto, Bars (in barrels) 132	0 0– —
Ditto, Refined 133	0 0– —
Banca 135	0 0– —
Straits 134	0 0– —

TIN-PLATES.*	
IC Charcoal, 1st qua. p. bx.	1 17 0– 1 17 6
IX Ditto 1st quality ,,	2 3 0– 2 3 6
IC Ditto 2d quality ,,	1 15 0– —
IX Ditto 2d quality ,,	2 1 0– —
IC Coke ..... ,,	1 11 6– —
IX Ditto ..... ,,	1 17 6– —
Canada plates.....p. ton	15 10 0–16 0 0

In London; 20*s.* less at the works.

Yellow Metal Sheathing...p. lb.	10½d —
Wetterstedt's Pat. Met.... p.cwt.	2 2 0
Stirling's Non-laminating, or Hardened, Surface Rails..p. ton	9 0 0– 9 2 0
Stirling's Patent Toughened Pigs { Glasg.	— – 5 5 0
Ditto Wales	4 0 0– 4 5 0
Indian Charcoal Pigs in London	— – 7 0 0

MANGANESE,† (21 cwts.)	
Ground.....p. ton	6 4 0– 7 8 0
Giessen Lump..... ,,	5 0 0– 5 5 0
Nassau ditto ..... ,,	4 5 0– 4 7 0

* At the works, 1*s.* to 1*s.* 6*d.* per box less.

† Four months' credit, and free on board at Rotterdam. The per centage of peroxide is about 60 for Nassau lump, 64 to 65 for Giessen, and 66 to 73 for ground.

REMARKS.—An attempt to describe at the present moment the course which metals will take would be attended with much difficulty, and the only criterion to give as to the present state of things is to represent metals just as they are, without expressing any opinion.

COPPER.—This metal is in great request, and many of the smelters refuse to execute orders unless at distant dates, others will take them, but not without an advance of ½*d.* and 1*d.* per lb.; some decline them altogether, whilst a few are open, subject to prices on delivery. The ores sold at Swansea, on Tuesday, amounted to 1669 tons; the quantity announced for the next sale is 1855 tons.

IRON.—Rails are in less enquiry, at slightly reduced rates. English bars are steady at the prices quoted. Staffordshire qualities very inactive for all descriptions. Scotch pigs have been stationary at 71*s.* 6*d.* for mixed numbers, g.m.b., f.o.b. in Glasgow.

LEAD.—Besides a large parcel of English offering at 20*s.* less than the current prices, nothing has arisen to interfere with sellers' quotations.

SPELTER.—An advance of 20*s.* per ton has taken place in this metal, and it continues to assume an upward tendency.

ZINC has risen to 35*l.* per ton.

TIN.—English and foreign uphold former prices.

LIVERPOOL, SEPT. 18.—Since the date of our last report, our market for manufactured Iron has improved in tone, and both makers and dealers give more cheering accounts of the general aspect of the trade. The enquiry for all descriptions of manufactured Iron has considerably increased, and orders are reported as being more plentiful. In the article of sheets, the Staffordshire houses experience a large demand, and the price is much firmer. Bars and hoops are in fair request also, at our quotations, and notwithstanding the continuance of underselling by the smaller makers, the prospects of the trade generally are in favour of prices being maintained at the next ironmasters' quarterly meeting. Welsh bars are rather quieter, if anything, but showing no tendency to reduced prices. Scotch Pig-iron has experienced a further slight reduction in price; this may be accounted for by the absence of all speculative business, which has hitherto, in a great measure, regulated prices. This speculative feeling being dormant, it certainly would appear that this branch of the trade is in a healthy position, for prices are mainly supported by the positive consumption and export of the material, and not by any fictitious means. The shipments continue to be large, being 10,964 tons, against 10,101 tons in the corresponding week of last year, or an increase of 863 tons; the shipments for the last seven weeks, as compared with the corresponding seven weeks of last year, show an increase of 13,128 tons, and the price at this period last year was 79*s.* 6*d.* to 80*s.* The market for English Tin continues to be very firm, and orders at full prices are plentiful. Tin-plates of first-class brands are difficult to obtain, even at extreme rates; stocks generally of this article are small. As yet there is no alteration in the price of Copper, for which metal orders continue to be extensive. Lead is quiet, and prices are unaltered. Since the foregoing was written, the market for Scotch Pig-iron has improved, 72*s.* being now offered, cash, for mixed numbers, storekeepers' warrants, f.o.b. in Glasgow. The following are the quotations:—Iron: Merchant bar, 8*l.* 7*s.* 6*d.* to 8*l.* 10*s.* per ton.—Tin: Common block, 131*l.* per ton; common bar, 132*l.*; refined block, 138*s.*—Tin-plates: Charcoal, IC, 36*s.* to 36*s.* 6*d.* per box; coke, IC, 31*s.* to 31*s.* 6*d.*—Lead: Sheet, 24*l.* per ton; pig, 23*l.*—Copper: Cake and tile, 107*l.* 10*s.* per ton; best selected, 110*l.* 10*s.*; sheathing and bolt, 1*s.* per lb.—Yellow metal sheathing, 10¼*d.*

PARIS, SEPT. 18.—The position of the metal market is without alteration, and at the ironmasters meeting, at Besançon, but little business was done; no variation in prices. Although large quantities of sulphurous mundic are produced annually from the mines of Great Britain, it has hitherto been comparatively worthless, and the demand, even at the low price it realised, has been extremely limited. In reference to the subject, the *Siecle Industriel* says that sulphuric acid, the base and pivot of all our chemical products, whether considered as a direct agent or as reactionary, has hitherto been obtained by the burning of Sicilian sulphur, and the condensation of the vapour. The possibility of manufacturing it from pyrites is now proved beyond doubt. This new process will cause a demand for pyrites, and considerably reduce the price of sulphuric acid. The usine of Risle, belonging to the Société du Vedrin, in Belgium, have had a process in use for extracting sulphuric acid from pyrites, and have been enabled to declare a dividend of 27½ per cent. out of profits made in 1855; and it appears that this satisfactory result has been obtained from the great difference existing in the price of the raw material, the Sicilian sulphur costing 4·73 frs. the 100 kilos., whilst that from the pyrites costs but 1·64 frs. for the same quantity. The patentee of the process, both in France and elsewhere, is M. Movillon de Glimes.

GLASGOW, SEPT. 18.—Since our last our market has remained without animation, with a moderate business doing, at 71*s.* 3*d.* to 71*s.* 9*d.* for mixed numbers, warrants. To-day, however, a slight advance has taken place, and the market has assumed a firmer tone. Several parcels changed hands at 71*s.* 9*d.* cash, and we closed still buyers at that price, sellers at 72*s.* No. 1, g.m.b., 74*s.*; No. 3, 70*s.*; No. 1, Gartsherrie, 78*s.* The shipments for the week ending Sept. 13 were—Foreign, 5299 tons; coastwise, 5665 tons=10,964 tons.—In the corresponding week of last year they 10,101 tons, showing an increase of 863 tons.

At Truro Ticketing, on Thursday, 4689 tons of copper ore were sold, realising 26,199*l.* 4*s.* The particulars of the sale were—Average standard, 131*l.* 2*s.*; average produce, 6¾; average price, 5*l.* 12*s.*; quantity of fine copper, 298 tons 5 cwts. The sale at Truro, on Thursday next, will comprise 3725 tons.

At Swansea, on Tuesday, 1669 tons of ore realised 24,068*l.* 17*s.* 6*d.*—The Cobre Mines, 675 tons, brought 10,828*l.* 2*s.* 6*d.*; Berehaven, 410 tons, 4031*l.* 11*s.*; Knockmahon, 282 tons, 3105*l.* 5*s.*; Namaqualand, 166 tons, 4412*l.* 8*s.*; Malaga, 79 tons, 551*l.* 11*s.*; Holyford, 39 tons, 887*l.* 5*s.*; Spanish, 14 tons, 183*l.* 15*s.*; and Tungkillo, 4 tons, 69*l.*—The next Ticketing, October 7, will comprise 1855 tons:—Cobre, 540 tons; Cuba, 452 tons; Berehaven, 424 tons; Knockmahon, 246 tons; French Slag, 77 tons; Great Barrier, 32 tons; Castilian, 60 tons; Peninsular, 22 tons; and Cape, 2 tons.

At New York (Sept. 3), pig-iron was in fair request, and a great deal of jobbing was done in English and best refined. Black tin was firmly held. Tin-plates have advanced. In lead nothing was doing. Copper and spelter were firm.

Our Boston (U.S.) correspondent, under date Sept. 5, writes—"During the fortnight, the dividend-paying shares have been somewhat active; while others, regarded as adventures of doubtful success, have been dull, with a downward tendency. Ingot copper has recently been sold at 25 cents; but, influenced by the accounts from English markets, it has again advanced firmly to 26 cents, four months, with a tendency to further improvement.—[We shall give the usual details in our next Journal.]

MINES.—Mining business continues in a very active state, and the increase of share transactions is daily perceptible. There have been within the last week or two some very important improvements and discoveries in a few progressive mines, which have caused a great influx of buyers in the market, as well as a rise in value in many stocks equal to 100 and 200 per cent. Added to this, the satisfactory state of the metal trade, to which we alluded last week, has given greater confidence in mines in general. We confidently look forward, therefore, to even a far greater increase in mining transactions, and are of opinion that before long other mines we might mention may cause as much excitement in the market as Great Alfred has done: shares in this mine rose as high as 16, and then became flatter, not from any falling off in the mine, for it continues to improve, but from the price inducing many parties who purchased before the rise to realise their gains, which in some cases have been very considerable; the shares left off at 14 to 14½. United Mine shares have been enquired after at 140 to 150, and an improvement may be looked for in the mine. Porkellis, as a tin mine, is holding out great prospects, and at the present price, 11*l.* per share, are considered cheap. At East Trefusis, there is a very fine gossan lode, and shares in request at 2½ to 3; At Grambler and St. Aubyn, the lode in the 24 east has improved to 20*l.* per fm. South Frances, 360 to 365; Basset, 285 to 290: Great Devon, 400, ex div. of 10*l.* per share declared on Wednesday; after paying this dividend, about 5000*l.* are added to the balance in hand, and the dividend at the next bi-monthly meeting is expected to be 12*l.* per share. Alfred Consols have been sought after, and have risen to 15¾, 16; Grenvilles have advanced, with a good demand, from 1⅞ to 2¼, 2⅜; the lode in Newton shaft is daily improving, and should a course of ore come in shares will go to a high price; altogether, 24,000*l.* have been expended on the mine, and from its immediately adjoining South Frances, and on the run of the Basset lodes, the progress of it is watched with great interest. Any discovery in Grenville would also cause a demand for West Grenville and South Condurrow, shares in both of which are now at mere nominal prices. East Pool have been enquired for at 275, but there are few sellers. Great South Tolgus, another good progressive mine, likely soon to pay dividends, has been enquired for, at 10 to 10½; Holmbush, 2 to 2¼; Tamar Consols, ⅞ to 1⅛; South Tamar, ⅛; West Basset, 30 to 31; North Basset, 38; Uny, 4¼ to 4½; Mary Ann, 38; Hender, 4¼ to 4⅜; Sortridge Consols, 2¼ to 2⅜; Gonamena, 27. Wheal Buller, owing to a reported improvement in the eastern levels, rose from 295 to 350, but left off at 330, sellers; the next dividend, it is reported, will not be more than 5*l.* per share. North Frances, 10 to 10½; Treleigh (old scrip), ¾ to ⅞; North Downs, 2¼ to 2⅜; South Tolgus, 150.

At Wheal Mary Ann account meeting, held on Tuesday, the profits on the quarter's working amounted to 2114*l.* 15*s.* 10*d.*, and a dividend of 2048*l.* (2*l.* per share) was declared, leaving a balance in hand to next account, 1308*l.* 16*s.* 10*d.*; the report of the mine is very favourable. At West Basset meeting, on Wednesday, a dividend of 13*s.* 6*d.* per share was declared—prospects of the mine good. At Trewetha meeting, the balance in hand was 1155*l.* 8*s.* 2*d.*, and a dividend of 614*l.* 8*s.* (3*s.* per share) was declared. At Buller meeting, a dividend of 10*l.* per share was declared. At Wheal Kitty meeting, the dividend was 10*s.* per share. Great Hewas sells 10 tons of tin, the produce of one month, and which about meets the cost. At South Cuddra, the 30 fm. level is opening out good ore ground, and lode improving west. At Ding Dong meeting, held on Monday, the accounts showed a profit of 1527*l.* 12*s.* 4*d.* on the quarter's working, and a dividend of 1680*l.* (2*l.* 10*s.* per share) was declared, leaving a balance of 763*l.* 6*s.* 4*d.* to credit of next account. The pitches in the mine are not looking quite so well as they have done, and, with the ends, are producing about 14 tons of tin per month. At Clijah and Wentworth meeting, the balance against the adventurers was 756*l.* 7*s.* 2*d.*, and a call of 15*s.* per share was made.

The sales of copper ore at the Swansea Ticketings, during the current quarter, ending Sept. 30, 1856, were—

Date.	Tons of ore.	Produce.	Standard.	Amount.
July 8	1,799	... 13⅞ ...	£108 6 0 ...	£23,002 0 6
,, 22	1,799	... 14⅜ ...	108 18 0 ...	24,173 9 0
Aug. 5	1,466	... 14⅜ ...	109 4 0 ...	19,708 9 6
,, 19	1,792	... 15 1/16 ...	110 5 6 ...	26,817 0 6
Sept. 2	2,236	... 14¼ ...	111 18 0 ...	30,577 9 6
,, 16	1,669	... 14 9/16 ...	114 6 0 ...	24,063 17 6
Total	10,761			£148,347 6 6
Quarter ending June	10,217			150,757 13 0
,, March	11,741			186,890 10 6
,, Dec., 1855	13,161			189,660 9 6
Total for the last year	45,880			£675,655 19 6
Quarterly average	11,470			168,913 19 7
Showing decrease	709			20,566 13 1
Sept. quarter, 1855, was	11,262			171,114 10 0

The present quarter thus exhibits a continued decrease in the quantity of ore, as well as money. The standard, it will be seen, has improved full 4*l.*; and the usual fortnightly sale, which should have been Sept. 30, does not take place until Oct. 7—say three weeks—when the quantity is 1855 tons: Cobre and Cuba rendering 992; Berehaven and Knockmahon, 670; with five smaller lots, 193, making up the total quantity.

There is likewise a considerable decrease in the quarterly sales in Cornwall, the last, ending June, being 54,273 tons, valued at 308,633*l.* 18*s.*; and the sales made for this quarter, including what is for sale on Sept. 25, is only 49,636 tons, showing a decrease of 4637 tons of copper ore.

Mining Exchange Official List of transactions during the week:—

SATURDAY, SEPT. 13.—Great Alfred, 11½, 12, 12⅛, 11⅝, 11¾, 12¼; Porkellis, 10¾ to 11; Sortridge Consols, 2¾, 2⅝, 2⅜; Tincroft, 4¼; Wheal Buller, 297½, 300, 302½, 305; Wheal Mary Ann, 38½, 38, 38⅜.

MONDAY.—Alfred Consols, 14 to 14⅛; Drake Walls, 1⅞ to 2; Great Alfred, 12⅜, 13, 13⅛, 13¾, 14, 12¾, 13, 13⅛, 13⅜, 13⅝, 14, 14⅛, 14⅜; North Downs, 1⅞ to 2⅛; North Trelawny, ⅝ to ¾; Pedn-an-drea, 17*s.* 6*d.*, 18*s.*, 19*s.*; Treleigh Consols, 16*s.* 6*d.* to 17*s.* 6*d.*; Treleigh Consols (new), 8*s.* 3*d.* to 8*s.* 9*d.*; West Frances, 20; Wheal Uny, 4¼; Wheal Wrey, 7⅞, 8, 8¼.

TUESDAY.—Alfred Consols, 15 to 15¼; East Rose, 11¼; Gonamena, 27½; Great Alfred, 15, 15⅛, 16, 14⅞, 15⅛, 15⅜, 14¾, 15, 15¼; Sortridge Consols, 2⅜ to 2⅝; Wheal Uny, 4⅛.

WEDNESDAY.—Alfred Consols, 15¼ to 15⅝; Clijah and Wentworth, 7½ to 8⅛; Great Alfred, 14⅛, 14¾, 13⅝, 14, 14⅛, 15, 15⅛; Hender, 4¼; Marke Valley, 4; North Downs, 2 to 2¼; Tamar Consols, ⅞ to ⅞; Old Treleigh Consols, ⅞ to ⅞; New ditto, 10*s.* to 11*s.* 3*d.*; Trewetha, 3⅝ to 3¾; Wheal Basset, 285.

THURSDAY.—Alfred Consols, 15¾ to 15⅝; Cubert United, ⅛; Great Alfred, 14, 14⅛, 15, 14, 14⅜, 15, 14⅛, 14⅜, 15, 14⅜, 14⅛, 14⅜; Great South Tolgus, 9⅜ to 10⅛; Holmbush, 38*s.* to 40*s.*; North Frances, 10⅛, 11, 10⅞, 11⅛; North Downs, 2 to 2⅛; Pedn-an-drea, 17*s.* 6*d.* to 23*s.* 6*d.*; Porkellis, 10⅞ to 11; South Frances, 360; Tamar Consols, 17*s.* 6*d.* to 18*s.* 6*d.*; West Frances, 18 to 18½; Wheal Grenville, 2⅜; Wheal Mary Ann, 38; Wheal Uny, 4¼ to 4⅜; Wheal Wrey, 8 to 8⅛.

FRIDAY.—Great Devon, 400, ex div.; East Buller, 2⅜ to 3; Great Alfred, 13⅞, 14, 13⅞, 13⅝, 14, 14¼; Great South Tolgus, 10 to 10⅛; North Frances, 10¼ to 10⅜; South Frances, 360, 365, 370; Tamar Consols, 20*s.* to 21*s.* 3*d.*; West Basset, 30; Wheal Grenville, 2¼, 2 5-16, 2⅜, 2⅛, 2 5-16.

Business reported to have been done on the Stock Exchange:—

MONDAY.—Alfred Consols, 13½, 13⅞, 14; Rosewarne, 60; Sortridge Consols, 2 11-16, 2½, 2⅝; Great Wheal Alfred, 13½; Treleigh, 6*s.* to 6*s.* 6*d.*; Tamar Consols, ⅝; Pedn-an-drea, 1; Trehane, 13*s.*

THURSDAY.—Alfred Consols, 15½; Rosewarne, 60; West Basset, 30½ to 31 (with div.); Duke of Cornwall, 20½, 19½, 20; Great Wheal Alfred, 14¾, 14¼, 14½; Wh. Grenville, 2⅛; Port Phillip, 3*s.*

The arrivals of ores and metals during the week are as follow:—

MONDAY.—In London, 4020 bars iron from Sweden, 779 packages copper ore from Sydney, 4 cases rolled zinc from Belgium.

TUESDAY.—In London, 31 cases 7 casks copper from Holland, 3 cases 1 cask copper from Sydney, 3054 bars iron from Sweden, 2783 bars iron from St. Petersburg.

WEDNESDAY.—In London, 1881 bars iron from Cronstadt, 610 bars iron from Hamburgh, 231 bundles and 600 kegs steel from Sweden.

THURSDAY.—In London, 2630 bars iron and 68 bags steel from Sweden, 298 bars iron from Cronstadt, 280 slabs tin from Holland, 78 cases zinc from Belgium, 972 pigs lead from Spain.

FRIDAY.—In London, 47 casks 6 cases copper from Hobart Town, 368 bars iron from Sweden, 315 bags copper ore from the Cape of Good Hope, 4 cases rolled zinc from Belgium, 3 tons iron Sweden.

The directors of the Devonshire Great Consolidated Copper Mining Company, at their board meeting, held yesterday, declared a dividend of 10,240*l.*, being 8*l.* per share, out of profits from sales of copper ores sampled in the months of May and June last. After payment of the same, there remains in hand a balance of 1,981*l.* 9s. 2d. in cash, ores sold, and reserved fund, applicable to the general purposes of the company.

The Wheal Buller meeting, on Tuesday, the accounts showed—Balance last audit, 2130*l.* 10s. 7d.; ores sold (less dues), 4977*l.* 5s. 8d.; received from Copper Adventurers, 530*l.*=7637*l.* 16s. 3d.—Mine costs and merchants' bills for July and August, 3381*l.* 8s. 7d.: leaving balance in favour of adventurers, 4256*l.* 7s. 8d. A dividend of 2560*l.* (10*l.* per share) was declared.

The Ding Dong Mine meeting, on Monday, the accounts showed—Mine costs and merchants' bills for the quarter ending June, 2443*l.* 6s. 4d. A dividend of 600*l.* (2*l.* 10s. per share) was declared.

The Wheal Margaret meeting, on Aug. 26, the accounts showed—Balance last audit, 108*l.* 19s. 4d.; tin sold, 3559*l.* 0s. 6d.; engine and materials sold, 181*l.* 11s. 6d.; dues, 11s. 4d.—Mine cost, 1979*l.* 8s. 5d.; coals, 137*l.* 1s. 4d.; merchants' bills, 108.; dues, 173*l.* 7s. 1d.; rent and taxes, 83*l.* 19s. 10d.: leaving balance in favour of adventurers, 1015*l.* 4s. 8d. A dividend of 896*l.* (2*l.* per share) was declared. The profit on the three months' working was 906*l.* 5s. 4d.

The Wheal Mary Ann meeting, on Monday (Mr. Peter Clymo, jun., in the chair), the accounts showed—Balance last audit, 1242*l.* 1s.; ore sold, 7211*l.* 13s. 10d. 1s. 10d.—Mine cost, merchants' bills, and sundries (including dues for three months, 585*l.* 17s. 4d.), 5096*l.* 18s.: leaving balance in favour of mine, 3356*l.* 16s. 10d. Dividend of 2048*l.* (2*l.* per share) was declared. The profit on the three months' working was 2114*l.* 15s. 10d. Capts. P. Clymo, jun., Henry Hodge, and R. Knapp's report is highly favourable.

The West Basset Mine meeting, on Wednesday (Mr. W. A Thomas in the chair), the accounts showed—Balance from last audit, 463*l.* 11s. 2d.; advance on account, 550*l.*; by copper ore sold, 8378*l.* 11s. 3d.; tin and sundries, 26*l.* 13s. 1d.=8468*l.* 15s. 6d.—Labour cost, 2051*l.* 7s. 5d.; merchants' bills, 954*l.* 6s. 3d.; tribute, 1078*l.* 11d.; advance on tribute, 493*l.*; property tax, 343*l.* 17s. 10d.; royalty, 418*l.* 8d.; sundries, 23*l.* 9s. 8d.: leaving balance in favour of mine, 4454*l.* 3s. 9d. Dividend of 4050*l.* (13s. 6d. per share) was declared. Captain W. Roberts reported 135 men were employed on tutwork, and 85 on tribute. It was rather early to make on the sampling for September 24, but it would most likely amount to about 200 tons. The prospects of the mine had improved within the last month.

The Trewetha Mine meeting, on Tuesday (Mr. John Balster in the chair), accounts showed—Balance last audit, 763*l.* 18s. 6d.; lead ore sold, 2284*l.* 12s. 1d.; interest account, 13*l.* 16s. 3d =3062*l.* 6s. 10d.—Mine cost, May, June, and July, 1736*l.* 12s. 7d.; royalties, 149*l.* 3s. 3d.; bill stamps and drafts, 1*l.* 2s. 10d.: leaving balance in favour of mine, 1155*l.* 8s. 2d. A dividend of 3s. per share was declared. Captains T. Richards and W. Rowe reported that the stopes were producing as much as the same as for some time past. They estimate the samplings for the next quarter at 78 tons of crop, and 24 tons of seconds ore.

The Silver Brook Mine special general meeting, held on the mine, yesterday, which was largely attended, it was resolved to forfeit all shares in arrear, but giving the power to the next general meeting, to be held on or about Oct. 15, to forfeit such shares upon which all calls shall then have been paid. A committee of influential shareholders was appointed to controul the present working of the mine, and with power to call in such professional assistance as they deem expedient.

The Oola Mine meeting, on Wednesday, the accounts showed a balance in favour of the mine of 5*l.* 17s. 3d. The balance of assets over liabilities was 1s. 9d. A call of 3s. 6d. per share was made.

The Old Bog Lead Mining Company meeting, on Sept. 11 (Sir John Dorat in the chair), Capt. Barratt explained that it would require 20,000*l.* worth of machinery to unwater the mine. At the end of two years, he would guarantee to the company at least 1500 tons of ore, and that the lead was worth 2*l.* per ton more than any ore in that part of the kingdom, which, at the present price, would yield a capital 10 to the outlay.

The Lady Bertha Mine meeting (Mr. J. F. Williams in the chair), the accounts showed—Balance last account, 126*l.* 7s. 11d.; ore sold, 430*l.* 3s. 2d.; carried, 4*l.* 13s. 3d.; calls received, 378*l.* 1s. 6d.=939*l.* 5s. 10d.: mine cost, three months, 1s. 8d.; merchants' bills and sundries, 56*l.* 17s. 11d.; dues, 85*l.* 2s. 5d.; leaving in hand, 18*l.* 19s. 10d. The estimated balance against mine was 434*l.* 19s. 1d. A call of 5s. per share was made. Capt. W. Goss reported the quantity of ground driven, and stoped for the past three months was 81 fms. 5 ft. 9 in.: average per month, 27 fms. 1 ft. 11 in. The machinery is now erected—that is, pumping, drawing machine, crusher, jigging machines, &c., complete; so that there is nothing here to prevent our progress, and the dressing-floors will now be enlarged occasionally may be required. He estimated the cost for the coming three months at 300*l.* per month, and he fully believed the returns would be from 250*l.* to per month for the same period. They had 37 tutwork men employed underground, 2 fillers and landers, 1 machine man, 2 wheelers, 4 surface labourers, 26 spalling pare, 1 carpenter, 1 smith: total, 74 persons employed on the mine.

The Wheal St. Aubyn meeting, on Aug. 25, the mine, which was formerly called St. Aubyn United, was divided into 500 shares, and a call of 1s. 6d. per share made.

The Okehampton Consols Mining Company meeting, on Thursday (Mr. J. Williams in the chair), the accounts showed—Calls received, 1084*l.* 1s. 6d.; dues due to bankers, 95*l.* 5s. 2d.; mine cost, 782*l.* 19s. 10d.; stationery, 6*l.* 3s 11d.: leaving balance in favour of mine, 199*l.* 11s. 7d. A call of 2s. 6d. per share was made. Mr. Joseph Richards reported that the engine-shaft was sinking in a congenial course of blue killas, interlined with small courses of elvan; the ground was now standing without timber, and the price of sinking was 18*l.* per fm. He proposes to sink 10 fathoms before cross-cutting to the lode, which is a very fine looking one, its main wall to wall being full 10 ft. wide; its general character of the finest possible description, being composed of first-rate gossan, with quartz and mundic. He had no hesitation whatever in stating that a fair and proper trial would be sure to be rewarded with the discovery of metallic mineral in abundance.

The Wheal Regent meeting, the accounts showed balance against mine, 1s. 10d.; balance of liabilities over assets (including calls unpaid), 2095*l.* 2s. 10d.; Mr. John Jenkin reports that the original company having only a water sett were obliged to confine themselves to the shallow levels, but even though working at such disadvantage, they realised handsome profits. West Crinnis Company work this mine to advantage (being so closely connected) with the addition of an inch engine, which will be sufficient power to drain both the setts to a 140 fm. below the adit.

The Wheal St. Aubyn meeting, on Aug. 25, it was resolved to re-work the mine formerly known as St. Aubyn United Mines, under the title of Wheal St. Aubyn, a new sett having been obtained from the Rev. H. M. St. Aubyn. The adventure was divided into 500 shares, instead of 1000 under the late company, and a call of 1*l.* per share was made, for the immediate prosecution of the mine. Captain Richard Read was appointed manager, and Mr. T. S. Symons the purser of the mine.

The East Rosewarne meeting, on September 1, the accounts for the three months ending June, showing a balance against the mine of 83*l.* 8s. 6d., were examined and allowed. The balance was divided *pro rata*, and a call of 1s. per share made, for the prosecution of the mine: the next meeting being appointed to be held on Monday, the 27 next. Captain W. Bawden, of North Pool Mine, gave a most satisfactory and highly encouraging report of the concern.

The Round Hill Mining Company meeting, on Tuesday (Mr. W. J. Reid in the chair), the accounts showed—Balance last audit, 374*l.* 9s. 11d.; ore sold, 1639*l.* 4s. 8d.; over-payment in May, 6*l.* 2s. 1d.=2059*l.* 16s. 8d.—Lords' dues, 10s. 1d.; mine cost, April, May, and June, 1816*l.* 19s. 8½.; sundries, 85*l.* 7s. 9d.: leaving balance in favour of adventurers, 7*l.* 19s. 2d. The committee of management re-elected. Capt. John Knecebone reported that the tribute pitches were looking well. They had sampled August ore, computed 40 tons.

The Wheal Guskus meeting was adjourned from Sept. 18 to Oct. 2.

The Daren Mine sold on Tuesday 10 tons copper ore, at 8*l.* 10s. 6d.

The Great Wheal Alfred, between 2000*l.* and 3000*l.* worth of copper ore have been discovered during the last week. The ends are looking better than ever, the 160 is a splendid course of ore. A shallow level is being driven in the 40 in the ground, the lode in which is improving, and spotted with copper ore.

The Leeds and St. Aubyn Consols, there is a very great improvement in the eastern levels. The monthly sale of tin next week, we are informed, will be nearly double that of either of the two preceding.

The West Wheal Bolton, on Wednesday, the 50-in. cylinder engine went to work, and it is reported that they have every prospect of a great mine.

The Aberdovy Mine, a 40-ft. wheel, 5 ft. breast, has been erected. In the 10 fm. level the lode is *four fathoms* wide.

The Ivybridge Mine, a great improvement has taken place in the 78 fm. level, where a branch of lead is met with, estimated to be worth 12*l.* per fm.

The Yeoland Consols, an improvement has taken place.

The Carvath Mine, the lode is improving in the bottom, or 30 fm. level: 3 cwt. of tin have been raised in the past four weeks.

A large amount of business has been done during the present week in shares of the principal mines in the List, including Great South Tolgus, Wheal Grenville, North Basset, Porkellis United, and Great Wheal Alfred. The latest reports from the latter mine are of the most satisfactory character.

The Linares Lead Mining Company declared a dividend of 5*s.* per share.

The East India Coal Company (Limited) have received a report, dated 4th, from Mr. Wilson, the engineer sent out in the *Bucephalus*, with machinery: "COPPENATHPORE, the main shaft is sunk 40 ft., being about 8 ft. through the bed of coal. This coal is being worked; when raised it is picked over and sorted into five qualities, Nos. 1, 2, 3. The best quality is a very good coal. This bed is of a hardish character. In the shaft the water is so easy, that the 6-in. pump is not in use, the water being drawn up occasionally by buckets.—At BASSARAH, a shaft has been sunk 60 ft., and the first bed of coal is in sight. At present the water is heavy.—At KOONOOSTORIA, the deepest shaft sunk is about 40 ft.; they are at present working through the sandstone. Mr. Taylor states, that after sinking 20 feet further the first bed of coal will be reached. The coal raised in this immediate locality, and other parties is of a very good quality, as I am informed.—At TOPOSI, the principal shaft sunk is 46 feet. The bed of coal has been reached, but at present the water has risen in the shaft. This mine has been previously worked: the bed of coal is about 24 ft. thick, the greater portion being of the best quality. I visited an open cut working, or quarry, worked by a native, closely adjoining this mine, and divided by a "nalla," or small stream, where I found the coal very near the surface—in places 15 to 20 ft., the bed of coal being, on an average 22 ft. thick, about one-third picked out as best quality. The shafts sunk are very good, requiring lining or walling with brick to the top of the sandstone only. The water being very easy in all mines generally, will be kept under with very little power. I find plenty of stone suitable for building purposes, and workmen of every description. By the next mail I shall be fully ready on which of the mines the engines will be fixed, as also on the general arrangements agreed on with Mr. Mackey.—JAMES G. WILSON, C.E.

The Pool River Land and Mineral Company have convened a meeting for Sept. 30, to bring the company under the Joint-Stock Act, 1856, limited.

The General Cooperage Company (Hamilton's patents) have obtained a certificate of incorporation under the Joint-Stock Companies Act, 1856, and have the business carried on at the factory at Mile-end for the last four years.

CITY, SEPT. 18.—There is little more disposition on to buy railway shares, but the extent of business transacted is not large. The intelligence that the Bank has not raised the rate of discount has tended still further to increase confidence.—T. W. Fox and Co.

In Foreign Mines, the market has been generally dull. Cobre Copper, have shown an upward tendency throughout the week. On Wednesday they changed hands at 55, and yesterday were dealt in at 57 to 57½. Oh Tuesday, United Mexican were 3¾, and yesterday improved to 3¾. On Wednesday, Imperial Brazilian were 2¾, and Linares 7¾. The closing price of National Brazilian was 3¼ to 3¾; St. John del Rey, 19 to 21; Clarendon of Jamaica, par to ¼ prem.; Copiapo, 16 to 18; Lineres, 7 to 8; Lusitanian, ½ dis. to par; Pontgibaud, 9 to 11; Santiago, 2½ to 2¾.

The Gold Mining Share Market continues neglected, and prices are merely nominal, no business being effected during the week.

In Miscellaneous Shares, the market has been quiet. On Monday Crystal Palace were quoted at 2; ditto Preference, 5½: Mexican and South American, 4½; National Discount, 5½; Peninsular and Oriental Steam, 67. On Tuesday, London General Omnibus, 3¾; Peel River, 2¾; Peninsular and Oriental Steam, 67⅛, 67, 67¾. On Wednesday, Canada, 125; Crystal Palace, 2¼; General Screw Steam Shipping Company, 13½. On Thursday, Australian Agricultural were 25½; Canada, 124; London General Omnibus, 4; National Discount, 5⅝; Van Diemen's Land, 25½. Transactions took place yesterday in Canada at 122 to 122½; Crystal Palace, 2⅛ to 2; ditto Preference, 5¼ to 5½; General Screw Steam Shipping, 13¾; National Discount (new), 1⅞; South Australian Land, 36. In Joint-Stock Banks, the market has not been well supported. The quotations will be found in the usual column. It was announced yesterday that 200,000*l.* would he required to make up the deficiency in the assets of the Royal British Bank, which involves calls amounting to 66*l.* 13s. 4d. per share.

The National Provincial Insurance Association, which has been established some time, is to be amalgamated with the Bank of London to a certain extent, having taken the premises adjoining that establishment, although it is stated in the prospectus that they are "entirely distinct and separate companies." The capital is fixed at 1,000,000*l.*, in 5*l.* shares, upon which 1*l.* is to be paid up, with a view of obtaining a working capital of 200,000*l.* Six of the directors of the Bank of London are members of the board.

The *Joseph Turratt* has arrived off Liverpool from Melbourne with 21,935 oz., of gold on freight, valued at about 88,000*l.*: her dates, to June 10, have been anticipated. The Royal Mail ship *James Baines*, from the same port, is shortly looked for, and is expected to bring a heavy remittance in gold.

An important decision has been pronounced by Mr. Commissioner Holroyd, in the Court of Bankruptcy. It appears that where a trader has come before the Court under a petition for arrangement he is not protected from bankruptcy, if it should appear that he has committed an act of bankruptcy prior to the filing of his petition.

It is stated that the results of the liquidation of the ship-building firm of Messrs. Mare and Co. will prove most disastrous to all unsecured creditors. A project is understood to be entertained for carring on the works of the concern at Blackwall by a limited liability company, under the management of Capt. J. Ford, late of the Turkish Navy, and of which Messrs. Rolt, Maudslay, Pietroni, and others, will be the promoters.—*Times.*

SALE OF MINING SHARES BY AUCTION.—Mr. T. P. Thomas submitted for sale, on Wednesday, several shares, including some in the best dividend-paying mines, but the attendance was thin, and few offers were made. The following shares failed even to find a bidder:—1 Wheal Buller, 1 Cambrian Gold (reserved price only 20*l.*), 1 South Wheal Basset, 1 South Wheal Frances, 20 St. Day United, 50 Castell Lead, 2 East Tolgus, 10 Bryntail, 100 North Ludcott, 50 Michell Lead Mine, 50 West Grenville, 20 Nanteos and Penrhiw. Fifty shares in East Frongoch sold at 2s. each, 18 in North Wheal Trelawny at 6s., 20 in Wheal Langford at 2s., and 30 at 2s. 6d.; 20 in Guskus at 3s. 6d., and 4 in Cargoll, the first at 20*l.*, and the others at 19*l.* 10s. each. Five East Rose Lead Mine shares were bought in at 9*l.* 10s. Ten Wheal Tremayne, the reserved price being 2*l.* 10*l.*, were bought in. Twenty Wheal Grenville were purchased by the auctioneer at 2*l.*, he having authority to that extent. Twenty West Sortridge sold for 3s. 6d., and 10 shares in Great Wheal Alfred put up in two lots; the first 5 realised 14*l.* 10s., and the last 14*l.* 5s. per share.

NEW JOINT-STOCK COMPANIES.—The following undertakings have been registered under the provisions of the new Joint-Stock Companies Act:—

Pankliban n Furnishing Ironmongery Co.
Telegraph Works Company.
National Advance and Deposit Company.
Householders' Coal Company.
Mount Gabriel Mineral Company.
Garnett and Moseley Gold Mining Company of America.
Winchester Water-Works Company.
Quartz Reduction Company.
British Steam Fisheries Company.
British Portable Gas Apparatus Company.
London Patent Brick Company.
Stourbridge Water-Works Company.
Lyme Cordage, Sacking, and Sailcloth Co.
East Dereham Corn Exchange.
Lincolnshire Patent Twitch Paper and Millboard Company.
Unity Loan and Investment Company.
Bradford Retail Grocers' Company.
North of Europe Steam Navigation Co.
Weedon Gaslight and Coke Company.
Chester United Gas Company.
Hertford Gaslight and Coke Company.
Winchester Gaslight and Coke Company.
General Credit Company.
Brenkburne Iron and Coal Company.
National Deodorising and Manure Co.
Schaffer's Patent Oil Grease Company.
Berwick Corn Exchange Company.

—making 60 new companies registered under the new Act, with those previously given.

RAILWAY TRAFFIC.—The Traffic Returns of Railways in the United Kingdom for the week ending Sept. 13, amounted to 490,690*l.*, and for the corresponding week of 1855 to 449,353*l.*, showing an increase of 41,337*l.* The gross receipts of the eight railways having their termini in the metropolis amounted for the week ending as above to 211,138*l.*, and for the corresponding week of last year to 198,433*l.*, showing an increase of 12,705*l.*

The increase on the Eastern Counties Railway amounted to 837*l.*; on the Great Northern to 1086*l.*; on the Great Western to 4634*l.*; on the London and North-Western to 3035*l.*; on the London and Blackwall to 159*l.*; on the London, Brighton, and South Coast to 2153*l.*; and on the London and South-Western to 1123*l.*; total, 13,027*l.* But from this must be deducted 322*l.*, the decrease on the South-Eastern, leaving the increase as above, 12,705*l.*

The receipts on the other lines in the United Kingdom amounted to 279,552*l.*, and for the corresponding period of 1855 to 250,920*l.*, showing an increase of 28,632*l.* in the receipts of those lines, which, added to the increase on the metropolitan lines, makes the total increase 41,337*l.*, as compared with the corresponding week of 1855.

SALES OF COPPER ORES.

Statement of copper ores sold at Swansea, by sundry Foreign and British Mines, for the quarter ending 30th September, 1856:—

FOREIGN MINES.

Mines.	Tons.	Amount.
Cobre	3529	£52,325 11 0
Kapunda	782	26,092 11 0
Spanish	976	10,176 17 6
Namaqualand (Springbok)	346	8,903 10 6
Cuba	467	6,643 19 0
Malaga	323	2,312 18 6
Garrucha	281	1,822 0 0
Preammima	45	896 14 6
Namaqua (T. W. and Co.)	40	852 13 0
African	38	636 3 0
Tungkillo	35	569 9 0
Castilian	58	445 0 0
Peninsular	49	312 7 6
Ophir	4	202 4 0
Walwich Bay	6	166 10 0
Wheal de Villiera	3	48 13 6
Melbourne	2	28 14 0

IRISH.

Berehaven	2195	£20,764 11 6
Knockmahon	1057	10,164 6 6
Holyford	133	2,540 1 0
Cronebane	94	503 19 6
Bamofylde	32	397 4 0
Dyliffe	43	318 4 0
Irish Ore	54	149 0 0
Tigrony	2	76 5 0

DEVON AND SLAGS.

Wheal Emma	65	£ 549 5 0
Queen of Dart	79	354 4 0
French Slag	23	103 10 0

RECAPITULATION.

Foreign	6984	£112,435 16 0
Irish	3610	34,904 11 6
Devon and Slags	167	1,005 19 0
Total	10,761	£148,347 6 6

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Copper Miners' Company	673	£ 8,053 17 3
Freeman and Co.	877	8,979 15 0
P. Grenfell and Sons	894	14,126 14 9
Sims, Willyams, Nevill, and Co.	863	12,003 19 6
Vivian and Sons	1838	21,118 6 0
Williams, Foster, and Co.	2226	27,244 4 9
Mines Royal Company	527	6,122 11 0
Spitty Copper Company	551	8,860 6 0
British and Foreign Copper Company	553	19,394 15 6
Mason and Elkington	336	9,933 4 6
F. Bankhart	983	9,598 12 9
C. Lambert	440	11,910 19 6
Total	10,761	£148,347 6 6

BLACK TIN.

Sold on the 13th September.

Mines.	Tons	c.	q.	lb.	Price per ton.	Amount.	Purchasers.
Great Wheal Vor..	7	16	2	21	£32 0 0	£642 8	6—Chyandour.
ditto	5	6	2	0	79 10 0	423 6	6— ditto
ditto	7	3	0	1	53 0 0	378 19	6— ditto
ditto	7	16	3	24	82 0 0	643 11	0—Mellanear.
ditto	5	14	2	1	79 0 0	452 6	2— ditto
ditto	5	3	1	6	53 10 0	276 6	10— ditto

Sold on the 16th September.

Great Polgooth ...	7	6	2	7	£73 10 0	£538 12	4—Enthoven.

Sold on the Mine.

Drake Walls	8	5	0	0	£81 5 0	£670 6	3—Enthoven.
ditto	8	15	0	0	69 0 0	611 5	0— ditto
Wh. Friendship ...	2	0	0	0	71 15 0	143 10	0— ditto
ditto	1	1	0	0	69 15 0	69 15	0— ditto
West Wh. Towan..	6	10	0	0	80 5 0	26 1	7—Daubuz.
ditto	1	0	0	0	73 5 0	3 13	3—Bissoe Co.

LEAD ORES.

Sold on the 6th September.

Mines.	Tons.	Price per ton.	Purchasers.
South Garras	30	£20 10 0	Sims, Willyams, & Co.
ditto	12	14 0 0	ditto
ditto	5	13 10 0	ditto

Sold on the 10th September.

Nant-y-Cria	29	£12 16 0	Newton, Keates, & Co.

Sold on the 13th September.

Great Wheal Baddern	21	£16 16 0	Locke, Blackett, & Co.
ditto	23	7 0 0	ditto
Herodsfoot	70	14 15 6	—

Sold on the 15th September.

Frongoch	60	£13 14 0	Newton, Keates, & Co.
ditto	60	13 14 0	Walker, Parker, & Co.
East Darren	70	16 7 6	ditto
ditto	10	15 2 0	Sims, Willyams, & Co.

Sold on the 17th September.

Nanteos and Penrhiw	20	£13 2 6	—

COPPER ORES.

Sampled August 27, and sold at Swansea September 16, 1856.

Mines.	Tons.	Produce.	Price.	Mines.	Tons.	Produce.	Price.
Cobre	92	12½	£12 9 0	Knockmahon.	70	15½	£15 16 0
ditto	87	12¾	12 5 6	ditto	68	9½	9 7 0
ditto	86	12¾	12 12 6	Namaqual'd { Wh. Maria }	40	25¾	25 13 6
ditto	85	13½	12 9 6	ditto	28	26	26 4 6
ditto	84	12¾	12 11 0	ditto	27	25½	25 13 6
ditto	73	13	12 9 0	ditto	10	25½	25 16 6
ditto	53	22	22 2 6	Springbok ..	41	27¾	28 7 6
ditto	52	21¾	21 19 6	ditto	10	25¾	26 1 6
ditto	46	21¾	21 17 6	ditto	10	27¼	27 11 0
ditto	17	70¼	69 13 0	Malaga	32	7¾	7 19 0
Berehaven ...	117	10½	10 2 6	ditto	24	8½	7 18 6
ditto	116	11¼	11 1 6	ditto	23	5¼	4 13 0
ditto	98	10½	9 17 6	Holyford	39	22¾	22 15 0
ditto	79	7¾	7 10 6	Spanish	14	13½	13 2 6
Knockmahon.	73	9¾	9 0 0	Tungkillo ...	4	17¼	17 5 0
ditto	71	10¼	9 19 0				

TOTAL PRODUCE.

Cobre	675	£10828	2 6	Namaqualand ... Wheal Maria .. Springbok ...	166	£4412	8 0
Berehaven	410	4031	11 0				
Knockmahon	282	3105	5 0				
Malaga	79	551	11 0	Spanish	14	183	15 0
Holyford	39	887	5 0	Tungkillo	4	69	0 0

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Copper Miners' Company	84½	£1057 5 9
Freeman and Co.	141½	1487 11 6
P. Grenfell and Sons	168½	3902 19 6
Sims, Willyams, Nevill, and Co.	278	3950 13 0
Vivian and Sons	192	2035 12 0
Williams, Foster, and Co.	92	1026 15 0
Mines Royal Company	116	1284 14 0
Spitty Copper Company	97½	1877 6 3
British and Foreign Copper Company	217½	4151 12 6
Mason and Elkington	14	344 10 0
F. Bankart	268	2949 18 0
Total	1669	£24,068 17 6

Copper ores for sale at Swansea, Oct. 7.—Cobre 540—Cuba 452—Berehaven 424—Knockmahon 246—French Slag 77—Great Barrier 32—Castilian 60—Peninsular 22—Cape 2.—Total, 1855 tons.

AVERAGES.

	Produce.	Price.	Standard.
British	11½	£10 19 6	£117 14 0
Foreign	17 3-16	17 1 0	112 11 6
Sale	14 9-16	£14 8 6	£114 6 0

Totals—British, 731; Foreign, 938=1669 tons (21-cwts.)

AVERAGES OF LAST SALE.

	Produce.	Price.	Standard.
British	10 3-16	£ 9 14 6	£117 11 0
Foreign	15¾	15 3 0	110 10 6
Sale	14¼	£13 3 6	£111 18 0

Totals—British, 613; Foreign, 1023=2236 tons (21-cwts.)

COPPER ORES.

Sampled September 3, and sold at the Royal Hotel, Truro, September 18.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols ...	128	£9 10 6	Phœnix Mines	57	£4 16 0
ditto	123	5 4 6	West Caradon	100	7 13 6
ditto	114	5 6 6	ditto	84	7 15 6
ditto	108	9 15 6	ditto	65	8 9 6
ditto	104	2 16 6	ditto	61	8 3 0
ditto	103	10 4 6	ditto	40	3 16 6
ditto	101	10 4 6	Bedford United Mines..	90	5 3 6
ditto	99	2 11 6	ditto	87	3 1 6
ditto	98	10 6 0	ditto	65	6 9 0
ditto	89	3 5 6	Wheal Friendship	70	7 0 6
ditto	88	2 19 6	ditto	61	14 0 6
ditto	86	2 14 0	ditto	29	2 17 0
ditto	85	3 11 6	Hingston Down	56	4 12 6
ditto	82	3 14 0	ditto	54	5 2 6
ditto	81	2 17 6	ditto	43	10 5 6
ditto	80	3 6 6	Collacombe	100	5 16 0
ditto	79	3 1 0	ditto	53	6 5 6
ditto	78	5 8 6	North Wheal Robert ...	92	6 9 6
ditto	77	5 9 6	ditto	34	3 16 6
ditto	76	4 8 6	Sortridge Consols	67	9 7 0
ditto	75	9 19 0	ditto	55	9 3 0
ditto	73	3 6 0	Kelly Bray	81	6 9 6
ditto	69	3 1 0	ditto	32	4 16 6
ditto	67	3 15 0	Wheal Arthur	41	3 11 6
ditto	46	1 14 0	ditto	30	3 4 6
ditto	40	5 10 6	Devon and Courtenay..	64	4 10 0
ditto	26	4 6 0	Wheal Zion	53	4 16 6
ditto	18	2 1 0	Lady Bertha	39	2 18 6
ditto	17	2 2 0	ditto	11	9 2 6
Phœnix Mines	102	6 10 0	Devon Buller	42	6 16 0
ditto	100	3 7 6	Tavy Consols	33	4 16 6
ditto	99	3 8 6	ditto	3	0 11 0
ditto	90	2 15 6	Wheal Langford	23	1 3 0
ditto	83	4 17 6	Hawkmoor	20	4 16 6
ditto	59	4 17 0			

TOTAL PRODUCE.

Devon Great Cons..	2310	£12414	14 0	Kelly Bray	113	£ 678	17 6
Phœnix Mines	590	2553	14 0	Wheal Arthur	80	272	7 0
West Caradon	350	2621	12 6	Devon and Courte..	64	288	0 0
Bedford Ut. Mines.	242	1152	10 6	Wheal Zion	53	256	14 6
Wheal Friendship..	160	1429	18 6	Lady Bertha	50	214	9 0
Hingston Down ...	153	977	11 6	Devon Buller	42	285	12 0
Collacombe	153	912	11 6	Tavy Consols	36	160	17 6
North Wh. Robert.	126	725	15 0	Wheal Langford ...	25	28	15 0
Sortridge Consols..	122	1129	14 0	Hawkmoor	20	96	10 0
Average Standard		£131 2 0		Average Produce			6¾
Average Price per ton				£5 12 0			
Quantity of Ore		4689 tons		Quantity of Fine Copper, 298 tons 5 cwts.			
Amount of Money				£26,199 4 0			
LAST SALE.—Average Standard				£127 12 0.—Average Produce			7¾

Standard of corresponding sale last month, 125*l.* 18s.—Produce 6¾.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal Company	223	£1063 0 6
Vivian and Sons	692	3635 14 7
Freeman and Co.	271	1939 14 0
Grenfell and Sons	276	1855 1 0
Crown Copper Company	167	831 5 0
Sims, Willyams, Nevill, and Co.	633	3136 13 0
Williams, Foster, and Co.	1121	6126 16 4
Spitty Copper Company	278	2140 4 0
Mason and Elkington	203	1102 19 0
F. Bankart	552	2525 13 10
Copper Miners' Company	273	1842 2 9
Total	4689	£26,199 4 0

Copper ores for sale on Thursday next, at the Royal Hotel, Truro.—Mines and Parcels.—United Mines 605—St. Day United Mines 450—South Caradon 404—Fowey Consols 400—Wheal Clifford 348—Perran St. George 338—Consols 259—Perran United 182—South Wheal Ellen 169—South Crinnis 160—Great Crinnis 142—West Fowey Consols 98—Wheal Vyvyan 76—Trethellan 28—North Wheal Busy 27—Wheal Ellen 25—East Wheal Leisure 9—Boundy's Ore 5.—Total, 3725 tons.

Copper ores for sale on Thursday week, at Randal's Hotel, Pool.—Mines and Parcels.—Wheal Basset 623—East Pool 535—South Frances 475—West Wheal Seton 372—Tincroft 351—Condurrow 266—Wheal Seton 334—North Pool 145—South Wheal Crofty 109—Camborne Vean 94—Dolcoath 54—Wheal Trefusis 42—North Wh. Crofty 41—North Roskear 33—North Downs 21—Treleigh Consols 17—Wheal Harriett 11—Richards's Ore at Ting Tang 2.—Total, 3425 tons.

THIRD SALE IN SEPTEMBER.

Year.	Tons.	Prod.	Amount.	Standard.	Ore copper.	Cake copper.
1847	4049	8¾	£24,373 1 0	£ 98 9 0	£87 12 0	£98 0–£101 0
1848	2592	10¾	15,065 15 6	81 5 0	85 3 0	79 10
1849	2467	9¾	16,475 3 0	99 17 0	70 14 0	84 0
1850	2670	9¾	17,149 14 0	96 14 0	67 14 0	79 10
1851	2630	8¾	15,182 5 6	85 18 0	64 19 0	84 0
1852	3352	7¾	23,399 15 0	127 7 0	91 12 0	102 10
1853	3790	7¾	26,496 10 0	127 7 0	91 8 0	107 10
1854	3975	7	27,812 13 6	138 4 0	99 7 0	126 0

THE PROGRESS OF MINING IN 1855.
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Notices to Correspondents.

THE COPPER TRADE.—SIR: Your correspondent, "A London Consumer," is inclined to think the smelting monopoly rather beneficial than otherwise to the miner. Such would doubtless be the case, were the combination continued merely with a view to the maintainance of high prices, much higher than at present, and only then. I am strongly impressed with a belief that both miners and consumers must take matters into their own hands, and thereby place themselves in an independent position, without which things will go on as they have for the last century, when there will be continued discontent by all parties (except those who are reaping a bountiful harvest), at the expense of the poor and badly-paid miners. These things ought not so to be.—ANTI-MONOPOLIST: *Sept.* 10.

ELECTRIC GAS.—This gas was patented by Mr. E. C. Shepard, although not his invention. The first description appeared in the Journal of June 18, 1853, and it was noticed in several other Numbers the same year. A prospectus was issued, in which it was stated that Dr. Leeson, Prof. Holmes, and Mr. Lewis Thompson reported on the process in the highest terms; indeed, so highly important was it considered in the scientific world, that His Royal Highness Prince Albert, attended by Viscount Torrington and Colonel Biddulph, visited Mr. Shepard for the purpose of inspecting his apparatus. Subsequently, a large sum of money was subscribed to test it in Paris, and the company, which was formed of some of the principal capitalists in this country and France, agreed to carry it on upon condition that the Invalides should be lighted up. Accordingly a suitable building and extensive works were erected; and here again the invention created so much interest, that Mr. Shepard was two or three times honoured by visits from the Emperor and Empress of France: but it is to be feared that the electric gas, like many other inventions of a similar description, though very interesting in the laboratory, will altogether fail when applied commercially. We shall be glad to hear whether any attempt will be made to resuscitate the invention.

TALIESEN MINING COMPANY.—SIR: In answer to your correspondent, "A Shareholder," he will find upon enquiry that the works are progressing very slowly through want of sufficient capital, and I believe the present committee are seeking either to dispose of the property altogether, or induce others to join. If worked with vigour, the prospects are represented to be favourable.—C. E: *City, Sept.* 17.

GREAT WHEAL ALFRED.—SIR: It is always gratifying to convey good news; and as the shareholders are spread over various parts of the country, many of whom receive their information through your valuable Journal, I have pleasure in giving extracts from two letters I have received from a friend of mine who resides in that locality. He says, under date Sept. 12—"Great Alfred is looking splendid; from their levels alone they can raise 1400*l.* worth of ore per month. This discovery is in the western part of the mine, and all in new ground." And under date Sept. 14, he writes—"Great Alfred is a wonderful discovery; the course of ore is 8 ft. wide, solid. This ore is discovered in the elvan, and will doubtless yield enormous returns for years to come; it is a stratum the most congenial to copper in the greatest quantity and richest quality throughout the western part of the great mineral district of this county."—A CONSTANT READER.

MINING IN JAMAICA.—The reports received by the last mail will be found in the usual column. They are of a satisfactory character, the operations at the various mines appearing to improve as they progress.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—SIR: When I wrote to you by the last mail from this place, I had not the Journal before me which contained the communication from "G. G.," dated Lincoln, May 9. I have now merely to notice his false statement with reference to 6000*l.*, which he says was "sent out by the directors last October." No such sum was sent then, but 3000*l.* was; none has been sent since; therefore he may amuse himself by enquiring for the other 3000*l.* at home.—H. V. HUNTLEY: *San Francisco, Aug.* 3.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—SIR: I have read a communication in your last Journal, signed W. A. Coombe, and as a large shareholder I am anxious to warn all my fellow-adventurers not to be led away by any false statements, evidently made under a sense of bitter disappointment; legal expenses may be a matter of no moment to Mr. Coombe; Chancery may be a region wherein he would like to dwell, but what is fun to him may be ruin to us. The fact is this, and what I wish the shareholders to consider, unless the directors are supported by the proprietary in taking the new shares, nothing remains but the Winding-up Act, which I know will involve a further contribution of 4*s.* or 5*s.* per share. The matter is clearly before us, either to support the directorate and save our property, or pay a larger amount and lose all: as wise men let us take the former course.—A COUNTRY SOLICITOR: *Birmingham, Sept.* 17.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—SIR: After reading in your Journal the plan of another new concern the directorate of this company are intending to form, and which appears, under all its bearings, most objectionable, the Leeds shareholders held a meeting, and unanimously passed the following propositions:—1. To reduce the number of shares to 60,000, and exchange one new for two old shares.—2. To pay 5*s.*, by instalments, upon every new share.—3. The preference shareholders to receive their value in new shares. By this mode it will raise 15,000*l.* new capital, which would pay all claims, and leave an ample surplus in the hands of the new directors. The above statement, embodied in form, was sent to the directors for their approval; but, as frequently the case before when the Leeds shareholders have written to the company for information, no reply has been received, not even an acknowledgment of its receipt.—J. TUNSTALL: *Leeds, Sept.* 16.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—SIR: About two years since my friend, Mr. Coombe, induced me to take some preference shares of him, and the whole of my preference has been the liberty of attending two or three meetings of shareholders, at some expense and sheer loss of time, besides being extremely ill at ease in finding the company's affairs so cruelly mismanaged. Having been accustomed to public accounts for the last quarter of a century, and some experience with joint-stock companies' accounts, I really have no hesitation in stating that the Anglo-Californian Company's accounts are a disgrace to a school boy of ten years old. Is there not sufficient public spirit left amongst the shareholders to form a committee, and save something from the wreck of our company upon which to build a new one? I shall suggest to Mr. Coombe, whom I know is indefatigable in matters of this kind, to look amongst his connection, and propose something of the sort; for surely the old shareholders will never entrust the late directors with power to get up another company, and then pay themselves, "*nolens volens*," the 3258*l.*, and afterwards very politely bow them out.—W. NEWMAN: *Gravesend, Sept.* 15.

ANGLO-CALIFORNIAN GOLD MINING COMPANY.—SIR: In the last Journal appears a letter from Mr. Coombe relative to the affairs of the Anglo-Californian Company, which contains this statement—"That the proposition for assigning the company's property to the directors emanated from themselves." This is an incorrect statement. In attending the meeting of the Anglo-Californian shareholders, held on Aug. 1, I met several directors at the offices of the company a short time previous to the commencement of business, and in the presence of several shareholders, I addressed to them the question, "Have you decided upon the resolutions which you intend to propose to the meeting?"—Mr. Parker replied, "We have not come to any final resolution; we are still in deliberation." I then said, "I am prepared, after mature consideration, to propose a resolution to the effect—'That the directors be offered the property of the company upon the terms of their agreeing to take upon themselves all the liabilities of the company in England and California.'" After the commencement of the business of the day, Mr. Parker brought me a resolution in the presence of Mr. Coombe and the whole meeting, embodying my resolution, but with a limitation as to the amount of liability to be undertaken by the directors. To this limitation I publicly and strongly objected. After some discussion, the directors acceded to my original proposition, "That they should bear all the liabilities." In this form the resolution was proposed by me, seconded by Mr. Coombe, and carried by a very decided majority of the shareholders present at the first meeting. The same resolution at the second meeting, held on Aug. 15, was carried unanimously, in preference to a counter resolution of Mr. Coombe's. These are the facts of the case. Now one word of comment upon them. I ask men of business, how in public companies anything can be settled, and acrimony of feeling and litigation avoided, if, after the clear decision of two public meetings, the minority be not ruled by the majority of shareholders?—WM. DRUMMOND: *Hayes, Kent, Sept.* 18.

ERRATA.—In Dr. Collyer's letter on Bessemer's Iron-making Process, in last week's Journal, two slight errors occurred,—for "*silicate*" read "*silicuret*," and for "*phosphate*" read "*phosphuret*" of lime.

MANUFACTURE OF STEEL—UCHATIUS' PATENT.—SIR: Can any of your correspondents inform me whether it will be practicable for Mr. Bessemer to granulate his iron, in the manner he describes in his patent dated Feb. 12, 1856, without obtaining a license from Capt. Franz Uchatius, of Vienna, to use his patent of Oct. 1, 1855?—C. J.: *Brussels, Sept.* 18. [A letter from "A Manufacturer," in another column, will meet "C. J.'s" enquiry.]

PLUMBAGO.—This mineral consists of carbon and iron. The price of the best Cumberland was 48*s.* per lb.; some of it now fetches as high as 30*s.* per lb. The inferior qualities are comparatively worthless. It is not used so much in the manufacture of pencils as formerly, the makers employing some composition. Graphite, which is an inferior sort of plumbago, is useful for the manufacture of crucibles. It is used to diminish friction, and protects iron from oxidation.

THE MINERS' COPPER SMELTING ASSOCIATION.—SIR: In noticing this project last week, I omitted to say it would be formed under the recent Act, which limits the liability of every shareholder. This, coupled with the universal demand for an Independent Miners and Consumers' Association, appears to be sufficient guarantee for success, and ample scope for testing the *bona fide* intentions of each; therefore, it is intended that this class of applicants shall have a prior claim to the said shares, but, of course, no unnecessary delay takes place in the issue thereof, should they be tardy in their movements.—YOUNG SMELTER: *Sept.* 18.

MANUFACTURE OF IRON.—SIR: Having observed that *L'Echo de la Metallurgie* speaks very reservedly on the new system of iron puddling, which is at present creating such a commotion, fearing that the claims of the Chenot family may be damaged by giving too much credit to the Americans or English, I should feel greatly obliged if some of your French correspondents could inform me what are the claims alluded to. I am aware that metallurgists are greatly indebted to the late Adrien Chenot for his vast improvements, but I had no knowledge that he had made any claim likely to clash with either Mr. Martien or Mr. Bessemer's patents. I entertain such an opinion of the Chenot family, that I feel certain they would not attempt to wear the laurels belonging to others; but when such an assertion is published as that contained in the journal above referred to, I think the principle of the Chenot claims should be make known, and more especially to the English public, who, in the event of their proving capable of becoming practically useful, would, no doubt, give them the advantage of development, which could not fail to prove highly remunerative to those concerned.—AN ENGLISHMAN: *Paris, Sept.* 19.

DUSTON IRON ORE COMPANY.—"E. F." (Bayswater).—The company are at present delaying the completion of the contracts for erecting the furnaces, as the directors have determined to await the results of Mr. Bessemer's process upon a more extended scale.

THE SOUTH TAMAR DISASTER.—SIR: I have not observed that any of your correspondents have informed you of the fact, as is stated in the neighbourhood, that about five months since a man named Robins, working at Tamar Consols (South Hoe), asserted in public company that the mine was in danger from the slide, and that, in consequence of this statement, he was discharged from his employment. Another statement is, that two of the men working in the mine some short time since had then misgivings as to its safety, in consequence of some gravel falling, and made an examination of the slide, when they were so far satisfied of the mine being unsafe that they left their employ rather than run the risk of the danger they saw impending. I may add, in the district there is but one opinion, which is that the mine has been lost from culpable neglect. Surely, some stringent enquiry should be made as to where the blame rests.—D.: *Sept.* 16.

CLARENDON CONSOLIDATED MINING COMPANY OF JAMAICA.—"An Old Subscriber."—We are informed that the necessary meetings will be called in a short time, for the purpose of placing this company under the New Joint-Stock Act, 1856. In accordance with the Deed of Settlement, two meetings must be held; but the second may be considered merely formal. The offices will be removed at the end of the month to Gresham House, Old Broad-street.

WEST CARADON MINE.—SIR: Will Mr. Crouch inform the shareholders why the ends in this mine are being driven towards Craddock Moor; what is his interest in the latter mine; how many shares does he hold in the former; and is West Caradon to be a medium for draining Craddock Moor? Reports are rife that our interest is being sacrificed to that mine: how is he concerned with Gonamena? Capt. Taylor, who is the agent of Craddock Moor, fills the same situation at West Caradon. Several of the ends at West Caradon are now within a few fathoms of the boundary of Craddock Moor, and it would be well if we had some definite account as to how that mine is managed. Capt. Dunstan was at one time the agent: I am not aware of the reason why he seceded, but I should imagine that Mr. Crouch could give us some information of that as well as of other affairs pertaining to the mine.—ONE INTERESTED: *Basinghall-street, Sept.* 19.

"A. C." (Bath).—In the early part of the reign of George III., Mr. Henry Rosewarne was Vice-Warden of the Stannaries: we presume it is from him that the district is named.

BOILING WELL.—SIR: I cannot account for the extraordinary depression in these shares, and beg to call attention to it, in the hope that some of your readers may be able to furnish a satisfactory explanation. I have watched the monthly sale of ores, and they have steadily increased; and in your Journal of last week I see they reached 163 tons = 1183*l.* 2*s.* 6*d.*, being in quantity only 17 tons less than Great Alfred, and upwards of 100*l.* more in value. From information I have received, the mine never looked better, and is justly considered one of the most promising in Cornwall. How can this unnatural depression be accounted for, whilst others, which are making heavy calls, and with less prospects of success, command large premiums?—JAMES CLEMENT: *Carmarthen, Sept.* 18.

BRITISH PORTABLE GAS APPARATUS COMPANY.—Mr. A. Brandram has used this invention in the chemical works at Rotherhithe, and the expense is calculated not to exceed 4*s.* 6*d.* per 1000 feet. Mr. Brandram says it can be used with perfect safety; and he adds that he has no interest in it other than admiration of a useful invention.

MOUNT CARBON MINING COMPANY.—SIR: I availed myself of your suggestion, and last week applied at the offices. I was politely told by the secretary, Mr. Alfred Jeffree, that unless I registered my name and address, no information would be afforded me. I understand there are a great many outstanding liabilities: for these I do not wish to be responsible. The company is evidently involved: surely our directors should have attended to our interests, considering the heavy item charged for travelling expenses, both from the north and west. A meeting should be called, either to wind-up the company, or adopt some measures to carry it on. After having been ushered into existence with such pomp and parade, in common justice it should not be allowed to depart without giving a sign. Let us publicly know the worst.—A SEVERE SUFFERER: *Brompton, Sept.* 18.

WALLER GOLD MINING COMPANY.—Mr. Hudson has returned from Virginia. Several of the directors are out of town, it being vacation time. A board meeting will be shortly held, and the reports of the property, which, we are informed, are of a promising character, will be published. A public meeting of the shareholders, we understand, will be held in the ensuing month.

THE MINERS' COPPER SMELTING ASSOCIATION.—SIR: From your last Journal, one is led to hope for the appearance of a prospectus, which is to contain the prophetic of the future in the smelting and consuming world of copper; and if my good wishes will be of any service to so valuable an enterprise, I freely give them, and in the usual but well-meaning sentiment of the miners, I say "Success to the scheme."—AN OLD MINER: *Sept.* 17.

IRON AND WOODEN SHIPS.—The paper by Mr. John Clare, jun., shall appear in our next Journal.

METAL STATISTICS.—"K. H." (Heidelberg).—The information required would fill volumes. We know of no work that would give it; however, a large portion of it is contained in a Chart published by us, and which may be obtained by ordering it of Mr. Engelhardt, bookseller, of Freiberg; the prices of metals for the past sixteen years are clearly shown in a diagram of little more than 12 inches square, whilst much of the other information is contained in equally small compass.

JOINT-STOCK COMPANIES ACT, 1856.—SIR: Your correspondent, "D. A.," of Paris, enquires whether the companies registered under this Act are bound to deposit their annual balance-sheet with the Registrar of Joint-stock Companies. I have carefully considered the Act, and am induced to give my opinion in the negative. Indeed, I should think that course needless, since by the 72d and 73d articles of Table B, a balance-sheet must be made out every year, and a printed copy of the same sent to the registered address of each shareholder seven days previously to the annual meeting. And as the list of shareholders must be registered, there can be little doubt that some one of them will be induced to make their contents known to the public, or the shareholders can at any general meeting, called for the purpose, pass a special resolution, ordering the directors to publish the balance-sheet in any particular journal, which would undoubtedly increase confidence in the undertaking. It would, however, be better were a clause inserted in the Articles of Association, compelling the directors to publish the balance-sheet.—N. L.: *Sept.* 20.

THE SLATE TRADE.—"An Old Hand" is unavoidably postponed.

NOUVELLES INVENTIONS.—"M. J. de M." (Besançon) est prié d'envoyer, en Français, les notes explicatives dont il parle. Très-souvent les Français savent lire l'Anglais sans pouvoir l'écrire mais nous prions à tous ces messieurs de ne pas permetre cette circonstance de les déranger; nous serons heureux de traduire leurs notes, et de les faire insérer au *Mining Journal* gratuitement.

THE MINING JOURNAL
Railway and Commercial Gazette.

LONDON, SEPTEMBER 20, 1856.

It would appear, from all received accounts, that the period is not far distant when the miners will be enabled to emancipate themselves from the present capricious sway of the smelters. A prospectus is already in course of preparation, and if those interested in mining will but energetically bestir themselves, and act with firmness and vigour, there is every hope that a more just and equitable system will be inaugurated: the miner will receive a better price for his ore, and the manufacturer be enabled to dispose of his goods at a cheaper rate to the consumer. It has been rumoured that, in order to counteract this movement, the smelters are about to raise the price of copper; the producers must not, however, be deluded by any such shallow artifices. Whenever the question has been mooted of erecting independent smelting-works, the tactics of the copper kings have been always to offer a better price for the metal, and they have thus endeavoured to stave off the evil which they imagined threatened them, and still retained the supremacy they have exercised, to the great detriment of the miner. The dissension and want of union among the latter body has likewise materially assisted them. If any real benefit is to be achieved, it can only be arrived at by combination, and a firm purpose to avoid all recrimination, together with a disregard to any petty jealousies that may arise.

The chief evils that hitherto have mainly retarded the progress of companies generally has been the great abuse of patronage, and the nepotism which has been exercised by the directors and officials connected with the several establishments. The lax supervision which has lately come to light has shown how loosely the affairs of many associations are managed. The profits of copper smelting are known to be enormous. The accuracy of the statements regarding them have been denied by the smelters, and therefore, we must assume that much which has been written is by no means exaggerated. It has been acknowledged by all that ample return can be afforded to any company who will content themselves with less gain; but the directors of such an association must bear in mind that they have a powerful and astute body to compete with. They must be prepared to encounter a determined opposition, and all the acts of intimidation, coercion, and tampering with the market, will be brought into play, as though, perhaps, large sums of money may be dissipated by them in the attempt, they will not regard this, so long as they attain their object of creating disunion, together with the ruin or abandonment of the project, knowing as they do that, should they still hold the monopoly in their grasp, they will be able, at the cost of the miner, to recover whatever sum of money they have disbursed in the endeavour to defeat him. Briefly, in order that such an establishment should be carried out successfully, it will be necessary that efficient superintendence is exercised, and the same diligence and care displayed as in a private undertaking. There must be no expensive and useless officials, and the directors should be working men, of business and good repute, and the practical part under the supervision of experienced men. These indispensable requisites complied with, we see no cause for apprehension, or any misgivings that profitable and remunerative results will not be arrived at.

The first smelting-works, we believe, were erected at Bristol, but afterwards, on account of the proximity of fuel, they were transferred to Swansea and Neath; and here the smelters began to exercise their domination over the miner. This was considered so great a grievance, that as early as the reign of QUEEN ANNE it was proposed that a memorial should be presented to her, praying that the copper might be coined in the county, the same way as tin, a duty of 1*s.* per cwt. of metal being payable to the Duke of CORNWALL: this, however, was never carried into effect, but shortly afterwards several people in the county thought it desirable that smelting works should be erected near the mines, and Mr. SCOBELL, in conjunction with Sir TALBOT CLARK and Mr. VINCENT, had a reducing establishment at Polruddan, near St. Austell, and copper of a good quality was turned out by them. After this Mr. JOHN POLLARD, of Redruth, and Mr. THOMAS WORTH, of St. Ives, made a second trial; this, however, failed, it is said, owing to the bad conduct of the operatives, it being suspected that they were bribed by interested parties. At Penpol, a house was erected by GIDEON COSIER, of Perranzabuloe: after his disease the works were carried on by Sir WILLIAM PENDARVES and Mr. ROBERT CORKER. An attempt was made at Lenobrey, near St. Agnes, but failed, in consequence of the want of a sufficiency of ore. In 1754, SAMPSON SWAINE, in conjunction with some gentlemen of Camborne, erected furnaces at Entral, in that parish; these were afterwards abandoned, and works were carried on by the same parties at Hayle. The Swansea smelters then, as now, did all in their power to destroy the independent works; they tried cajolery, intimidation, raised and depressed the market, and used all manner of artifices in order to destroy the new company. At North Downs a smelting establishment was erected; this was afterwards removed to Tregew, near Falmouth, and there made remunerative returns.

From the foregoing remarks, it will be seen that smelting in Cornwall has been profitably carried out formerly, and the cause of its abandonment can only be traced to the combination of the smelters and the disunion of the miners. If smelting works are to be successful they must be practically managed. All new improvements of utility should be introduced; but of late years experience has shown that many of the patents for the improvement of smelting copper ores have proved abortive, and although several have been chemically right, yet, when tested, they have been found commercially wrong. At present, the process of precipitation by acids is exciting some notice. M. SINDING is reducing slags at Foldal, Norway, and at Twista, we are told, large profits are being made. We have not the particulars of these patents, but from what we have gleaned, we are led to believe they are only a modification of what has long been known. About 1710, Mr. COSTER discovered that a pick left in the water at Chacewater, now known as Great Wheal Busy, was incrusted with malleable copper. Previous to this period the burnt leavings of tin had been thrown away, containing a great deal of cupreous matter, but these were afterwards purchased by Mr. MORGAN BEVAN, an eminent assayer of that day, who was enabled to give 7*l.* 4*s.* per ton for them. In our time, the pumps of the United Mines have been taken up and scraped, in order to obtain the copper, and it is a common custom in Cornwall to throw down the shaft pieces of old iron hoops, &c., to absorb the copper. In 1765, a discovery was published of the transmutation of iron into copper, at Herrengrund, in Hungary.

About the same period it was practised at Cronebane, in the county of Wicklow. The water there having this vitriolic acid in a high degree, Captain THOMAS BUTLER, of Redruth, who was manager, persuaded the proprietors to adopt the scheme of precipitating the copper, and made out of this considerable profit, in ten years yielding to the proprietors no less a sum than 17,259*l.*, without the expense of fuel; the precipitate thus formed yielding more than 50 per cent. of pure copper. The method used there was, pits were dug at a proper distance in the adit, or so near as to admit the water; in these were placed wooden rails, somewhat like a bottle rack, so as to suspend the iron thereon. In these several tons were placed at a time, and in about six weeks the whole was totally dissolved, the precipitated copper was then taken out fit for sale. The greatest part was in the form of gossan, interspersed with several grains of copper. The Wheal Crofty it was tried, but without effect. It is further stated that in the county of Cornwall there are several rills of this water, which do considerable mischief, yet have not hitherto been properly applied, owing to want of attention to their properties.

We have deemed it our duty to draw attention to this process; whether it is identical with the method so long known we are unable to say, but it appears to bear a considerable analogy to it; it is a matter that all interested in mining or smelting should investigate, so as to arrive at its true worth. The new company must not fritter away its capital in experiments, however glittering and enticing they may be. If they wish to ensure success, their business must be so practically carried out, that there will be able to compete with their opponents, without the risk of defeat and consequent discomfiture from the monopolists.

In the endeavour to prove that mining companies are not compelled to register under the Joint-Stock Companies Act, 1856, although the majority they propose to work be not within the jurisdiction of the Stannaries, it has been argued that clause 4 of the Act contemplates companies carrying on business contrary to this provision, and imposes a penalty, saying that they do carry on business contrary to this provision the shareholders shall be severally liable for the whole debts of the company. By two correspondents, mining companies for working mines in Wales are adduced as instances, the one asking, Who is to compel the company to register? Under what clause is it prevented carrying on its business? Who can proceed against it? Where is it declared illegal? And asserting that the repealed Joint Stock Companies Act, and our courts of equity and law, have always recognised mining companies on the Cost-book System, although out of the jurisdiction of the Stannaries, and that clause 110, therefore, impliedly admits the legality of such company to carry on its business as heretofore. The other stating that he has made application to the Registrar of Joint-Stock Companies for his decision, as he considers that if the registration be not compulsory upon companies not exempted under clause 4, there was no necessity for any exemption at all.

The majority of these questions were met by our remarks last week, but there remains some to which we may give consideration. It is asserted that the repealed Joint-Stock Companies Act, and our courts of equity and law, have always recognised mining companies on the Cost-book System although out of the jurisdiction of the Stannaries; and whilst we freely admit the truth of that assertion, we contend that there were causes for the adoption of such a course at the time of the passing of the Act of 1856, which do not exist in 1856, and that consequently arguments which were thoroughly applicable to the one Act have no effect whatever upon the other. The Act of 1844 contained no special clause with reference to the Stannaries Court; indeed, the existence of such a court is not mentioned. Now, it is evident that in the first place, as the powers of the Stannaries Court were not lessened or altered in any way, there were no grounds for interfering with such companies as were constituted in accordance with the rules of that court; and secondly, as the districts to which the Cost-book System was applicable were undefined, it would have been unjust towards companies on the Cost-book System to have decided that they were subject to the Joint-Stock Companies Act of 1844, under any circumstances. As, however, no assertion should be made without ample data to support it, we will refer to the difference of the position in which mine

companies not working mines in Cornwall or Devonshire are placed by the two Acts, to prove that there is no reason for the companies referred to being considered as exempt from the provisions of the Joint-Stock Companies Act, 1856.

That the several Acts passed for the administration of justice in the Stannaries were considered unintelligible, or, at least, extremely difficult to be comprehended until lately, may be judged from the preamble to the Act 18 VICT., cap. 32, wherein it is stated that it is desirable to explain and amend those Acts, and the principal amendment occurs in clause 32, which enacts that "the jurisdiction of the Court of the Vice-Warden shall henceforth be extended and exercised over the county of Devon, and over the mines and miners therein, and the process of the said Court, both at common law and in equity, shall run in and be executory throughout the counties of Devon and Cornwall."

But for this Act all mines, even in Devonshire, worked by more than twenty partners would have been subject to the new Act, whether they were conducted upon the Cost-book System, or in any other manner. The Act 18 VICT., cap. 32, clearly defines the jurisdiction of the Stannaries Court, so that no differences of opinion can arise on that point, and it now remains to us to prove that all mining companies not within the jurisdiction of the Stannaries are compelled to register under the Joint-Stock Companies Act, 1856, and that there remain no grounds for our courts of law or equity recognising such mining companies, unless registered under the said Act, although they were justified in doing so, in accordance with the Joint-Stock Companies Act of 1844.

Upon reference to the Act 7 and 8 VICT., cap. 110, we find clause 63 to enact "that nothing in this Act contained shall extend, or be construed to extend, to any partnership formed for the working of mines, minerals and quarries of what nature soever, on the principle commonly called the Cost-Book Principle. Had such a clause been inserted in the Joint-Stock Companies Act, 1856, we would readily have admitted that all mining companies on that system were exempted, since it was, under 7 and 8 VICT., 110, only necessary that the mining company should be upon the Cost-Book Principle; but, with regard to the new Act, the case is entirely different, for it is therein provided that only such companies as are formed for working mines within and subject to the jurisdiction of the Stannaries shall be exempted from complying with the Act. With reference to the argument, that had clause 4 gone no farther than to enact that "not more than twenty persons shall, after Nov. 3, 1856, carry on in partnership any trade or business having gain for its object unless they are registered as a company under this Act, or are authorised so to carry on business by some private Act of Parliament, or by royal charter or letters patent, or are engaged in working mines within and subject to the jurisdiction of the Stannaries," all companies not within the exception would be bound to register, whilst, by adding the particulars of the penalty which shall be incurred for non-compliance therewith the case is exactly reversed: we contend that such opinion is not justified by the Act, since by construing either the Act of 1844 or that of 1856 in that manner, both Acts would be rendered perfect nullities, for in both Acts the enactment and penalty are, in many instances, contained in one clause, and to read each of such clauses as inflicting a penalty simply because it is not imperative to comply with the enactment, instead of considering the penalty as a provision for preventing persons acting illegally with impunity, would lead to difficulties really dreadful to contemplate.

Such being our view of the case, we are induced to express our opinion that all companies not within the exception in clause 4 are compelled to register under the Act; that by the same clause they are prevented from legally carrying on their business, and that clause 110, which we may add is the first of the temporary provisions, was intended merely to apply to partnerships consisting of 7, but not more than 20, partners; to partnerships of any number enjoying the privilege of private Acts of Parliament, of royal charters, or letters patent; and such companies as are, or may be, engaged in working mines within, and subject to, the jurisdiction of the Stannaries, all of which descriptions of partnership are permitted, although not compelled, to avail themselves of the provisions of the Act. The position of partners in concerns neither registered under this Act, nor included in the exceptions in clause 4, is most unenviable, since, from the fact of their being connected with an illegal company, they are subject to all the penalties inflicted by the Joint-Stock Companies Act, 1856, without being permitted to participate in its advantages; they have no power, whatever may be the wording of their so-called deed of settlement, to check the acts of their directors or secretary, nor to deal with them in the event of the most wasteful or reckless expenditure; no power to compel them to furnish any report of their operations, or account of their receipts or expenditure; and if the directors declare dividends from capital, or even out of funds with which creditors should be paid, the other shareholders have no remedy against them; but, as the penalty for their illegal proceedings, are liable to be again called upon for the whole debts of the company. Indeed, each shareholder is as much at the mercy of the directors and secretary as the shareholders in a *société en commandite* are at the mercy of the gerant, or even more so; for, in the case of a *société en commandite* the gerant is, at least, governed by certain vague and not stringent laws, but the directors in an unregistered company are subject to none, except as partners in an illegal partnership; and whilst the existence of such a partnership is recognised by law for the purpose of inflicting penalties, or rather every party to the illegal action is equally liable to be brought to justice, whether he has taken part in the management or not; in the event of any partner being sued he cannot claim exemption from any portion of the liability on the plea that others are equally liable, and even if he relinquish his shares his liability will remain equally unlimited, so far as regards debts contracted by any member of the partnership on their behalf previous to his transferring them.

The gloom which has been hanging over the money market for some little time is now beginning to wear away, and it is apparent that there was no ground for it which would in any way interfere with the general prosperity. The causes have been special, but being at the same moment, have produced an effect which neither would have done of themselves. There has been a great demand for silver for exportation to China and elsewhere, but the main reason has been the necessity of country bankers making unusual provision, in case the failure of the Royal British Bank should lead to extraordinary calls; added to the fact that at this season of the year advances are always made to the farmers against the incoming crops and for harvest purposes.

The real state of the money market is sound, and the intelligent City men consider that there will now be a rapid reaction in the prices of the funded securities. Our information on monetary matters is usually very correct, and we have recently shown that we have been much in advance, on these subjects, of those of our contemporaries who profess to be especially conversant with commercial and mercantile affairs.

A rise in Consols will necessarily give great impetus to every description of enterprise, and lead to the introduction of numerous projects of all kinds, save and except for joint-stock banks. The mining interests have taken the start as respects improved condition and prospects, for great activity already presents itself in the different localities, and the prices of the metals are advancing steadily and continuously. In reference to new mines, moreover, we do not hear much said, and we believe that existing and *bona fide* projects will alone be countenanced by those who are now identified with this branch of commerce. We allude here to British mines, for of foreign mineral undertakings no doubt there will be many, and some of doubtful hue. We have already, however, more than once given caution to our readers against the various Russian, Turkish, and other anti-English schemes with which the market will teem, and urge, in contradistinction to these, the due consideration of Australian and Indian associations which will be brought forward.

With these countries Englishmen are closely identified; their advancement increases the prosperity of the mother land, and all their plans and projects are British. No foreigner intermeddles, and home rules and regulations guide their operations. There is, consequently, not only confidence, but security; whereas, those who prefer Russian, Turkish, and such like adventures, must submit to all which is at variance with English associations, and will be certain in the end to lose all they embark. Both India and Australia are completely in their infancy as regards the great wealth and resources of their vast territories; and what has already been brought to light is good earnest that there is no mistake about the capabilities of both for producing all that is necessary to carry on extensively every description of commerce, art, and science.

The introduction of railways will tend more than anything to open up these countries. In India, several are being laid down, and others are determined on. In Australia, there are two in course of construction, and another in continuation of the Melbourne and Geelong line is proposed by London capitalists, so as to give direct communication between the present gold fields and the ports of Geelong and Melbourne. Here it is expected that new gold deposits will be discovered in the line of rail; but be this as it may, the fact of bringing the existing localities of gold produce in close proximity with the coast and large towns, by rapid intercourse, is of itself sufficient to give great impetus to numerous matters of general commerce which the different points will require. Australia is a country which will rise with great rapidity. It has already done wonders for itself, and it is evidently destined to take a high position. Her resources no one yet can tell, but the extent of her mineral productions are already known to be enormous, and every advance of location brings fresh deposits to light.

India is even more unknown as respects the mineral productions, but what has been brought into operation shows that every description of ore exists in various places, and no doubt they will be found in great fields as we advance into the interior, and which the introduction of railways will enable us to do with facility. We are only speaking now of matters more closely connected with, and interesting to, our class readers; but both in Australia and India there are vast facilities for the establishment of every description of manufacture, and the adoption of all points of staple commerce. We do, therefore, again urge caution and reflection before rendering support to anti-English projects, and we hope, indeed, we have given statistical evidence to prove that loss is evidently the sequel of all such undertakings to the English capitalist.

In our allusion to the failure of the ROYAL BRITISH BANK, we made special mention of the fact of so many widows and spinsters being found in the list of shareholders, and at once saw the serious consequences which would most probably ensue to numerous families throughout the country. Further investigation of this subject renders it much more alarming in this respect than we contemplated, for it appears that many, if not most, of these lady shareholders are of little, or no, means beyond the amount embarked in this defunct association, and inevitable ruin and misery must result. It is, however, considered by some persons that their impoverished position will render them free from trouble and annoyance; but we cannot see the question in this light. We do not calculate that the depositors and other creditors of the bank will prove a body of philanthropists, nor that lawyers will not be found ready and willing to enforce the law against any, whether widow or spinster, where there is the slightest probability of obtaining contribution. Altogether a most lamentable state of things is brought to pass through the mismanagement of this bank, and it is quite impossible to determine the end of the difficulties which it occasions. It has already produced a serious shock to the character of banking, not only in the metropolis, but in the provinces, and will hasten that revolution in the whole system of banking which is clearly foreseen, and to which we have more than once alluded.

A very slight matter will produce a general outcry against mining, but we should like to know where an instance can be found in the whole history of British mining at all analogous to the case of the Royal British Bank. Indeed, if the losses of several years, resulting, moreover, from ill-digested if not dishonest schemes, were enumerated, the amount would fall far short of the sum which is already known to be deficient in the Royal British Bank; while if legitimate and honest adventures for the production of ores, which have proved of little worth, were alone taken into account, the aggregate capital would be quite insignificant compared with that of the bank which has just failed. The great error in mining generally is the want of proper and adequate capital at first starting. This we have pointed out over and over again, and where mines are abandoned for want of funds, the real cause is not allowed by the general public, but the stoppage is attributed to the worst causes, and the hardest terms are applied to the promoters or original shareholders.

An instance in illustration of this fact occurred only last week. A member of the Stock Exchange, who is well known as having realised a large fortune in connection with *concessions* for foreign railways, and other anti-British projects, which have ended, more or less, in utter loss or great depreciation of the capital embarked, happened to have some shares in the South Tamar, and when he heard that the river had broken into the mine went about the City declaiming against English mining, and declaring it to be little short of swindling. Had the term been applied to some of those foreign projects by which he has realised much benefit, it would have been more just, and nearer approaching truth. Here, then, we see that a casualty is denominated a fraud, and this, too, by a gentleman who assumes a position in the City, and in matters which affect his purse is long-sighted and crafty to a degree.

Returning to the subject of banks, we are not at all surprised to find that pamphlets begin to appear on this very critical question, and to some we will refer more specially in next week's Journal. We were quite prepared to see many when we roused attention to this all-important matter. They ever precede agitation of great questions, and there is no question more serious at this moment than the remedy necessary to put banking on a sure and solid basis,—into a position above reproach, and one which shall give reciprocate advantages both to the depositor and the shareholder. It is quite absurd to suppose that the system can proceed much longer as at present constituted; it is monstrous to imagine that the depositor should be in a worse position than the shareholder, as respects benefits and advantage, while the shareholder trades in the money of the former. The march of intellect, and common sense also, has been too rapid to admit of a continuance of the present principle, and the scandal which has been brought upon both private and joint-stock banking within the last year has expedited a crisis. We are clearly on its eve. We mean a moral revolution of the system—a quiet yet total change of the whole principle as between banker, shareholder, and depositor. It applies to joint-stock banks as well as private firms, for circumstances have shown clearly that the former are no better than the latter in the question of general business. Both go for the same result, both run the same risk in competition for business, &c., and it would seem with no better security in the one case than the other to the real provider of the floating capital. The Royal British Bank was born and bred on the joint-stock principle, and Messrs. PAUL, STRAHAN, and Co., were the essence, *par excellence*, of the "good old system." In what respect do these cases differ? Very immaterially. The new one paraded a list of shareholders, and on the faith of this depositors placed their money, which was squandered and ill-appropriated by the directors; and the private establishment used the money of its customers for its own convenience. It seems to be the same sauce both for the goose and for the gander—neither give security for restoring the savings of the provident, the widow's portion, or the infant's patrimony. All are alike; the one, however, render themselves amenable to criminal prosecution, and are now suffering the consequence of their acts; but the others, although equally reprehensible, will escape unscathed, because they have not passed the boundary between moral and criminal delinquency, although the consequences are about the same.

It has been justly remarked that banks should be like a clock under a glass-case; they should not only be on a solid basis, and point to a most accurate result, but the internal movements should be patent to all. It must come to this, sooner or later. The public will not be put off with the *ad captandum* balance sheets presented by the joint-stock banks, nor will they submit to the dark uncertainty of the private establishments. Both are coming to an end in this respect, and the public will reap the benefit. Last week we pointed out how monstrous it is that the depositor, who is the true provider of the cash, is the worst treated—by the private banks with the most sovereign contempt, and by the joint-stock banks as worthy only of a trifling interest on the balance of deposits.

We mentioned that the Unity had made a movement in the right and equitable direction, but from what appeared at the meeting on the subject of quarrel between MR. BAYLIS and the Unity Insurance Company, it is evident that the same despotic and, consequently, "no-good system," pervades their management as other banking concerns. It, indeed, appears incredible that a bank should descend to such a miserable position as to require that all its clerks, ill-paid at all times in banks, should be compelled to insure their lives in the life department of the Unity projects. A more paltry fact was never before made public, and it is of itself sufficient to shake confidence in the business capabilities of the executive. The entire principle of banking, and of banking management, requires prompt and extensive re-organisation, and every day brings its consummation closer, and makes its necessity more apparent.

Referring to the statistics of banks, we find that there are 27 joint-stock establishments in London, besides the London and Paris, which it is better to omit from our figures. The aggregate paid-up capital is no less than 13,995,775*l.*, varying in sums between 150,000*l.*, that of the City and Unity, and 1,256,325*l.*, which is the capital of the Oriental. Of this amount 5,945,000*l.* is for London business exclusively—that is to say, the totals of banks whose ostensible business is in England,—and 7,519,525*l.* as connected with colonial enterprise, but whose chief management continues in London: 531,250*l.* is absorbed by the Bank of Egypt and Ottoman Bank, which, although promoted by English capital, and whose seat of management is London, have not for object the promotion of British localities or enterprise. The home list consists of the banks of London—City, Commercial, London and County, London Joint-Stock, London and Eastern, London and Westminster, National Provincial, National Provincial of Ireland, Union, Unity, and Western of London. Those which may be termed colonial are the Bank of Australasia, British North America, Chartered Bank of Asia, Chartered Bank of India, Asia, and China, Colonial, English, Scottish, and Australian, London Chartered Bank of Australia, New South Wales, Oriental, Ionian, South Australia, and Union of Australia.

The highest rate of interest paid by the London joint-stock banks is 16 per cent.—that of the London and Westminster and National Provincial. The highest division amongst the colonial banks is 21 per cent., being the interest paid by the Bank of Australasia and Union Bank of Australia.

Considering the amount more exclusively identified with London business—viz., 5,945,000*l.*—there is good evidence of the extent of business done by these firms, for it must be borne in mind that these figures represent only paid-up capital, and have nothing whatever to do with the deposits which would swell the trading capital to an enormous amount. There is clearly, therefore, a fine field for the discount companies on which to operate; and what has been done in the short time since the new system was introduced, demonstrates the desire there is for such establishments, and an alteration in the present principle of banking.

The capital of 5,945,000*l.* absorbed by the 13 London joint-stock banks is four times more than the money invested in 94 dividend-paying mines; and the results as to dividends are not for a moment to be compared; while now that limitation of liability is given to those who invest in mining enterprise and is withheld from those who support joint-stock banks, the difference of position is altogether incomparable. The amount of money represented as invested by 350 mines, which have before been enumerated, is 3,769,016*l.*, or about half of that abstracted by the 13 banks. The 12 colonial banks represent 7,519,525*l.*, which is more than five times the amount of the 94 dividend mines; and although two of these establishments have divided as much as 21 per cent., with every prospect of continuing lucrative business, yet they do not approach the benefit accruing to those who laid out their capital in these British mines. Neither to London joint-stock banks nor those associated with our colonies are we, therefore, to look for successful competition with the mining industry of this country, and which daily assumes a much more important and satisfactory position, and consequently giving greater prospects of large and increasing dividends. During the last week the shares of a mine (the Alfred) have risen from 2*l.* 10s. to 15*l.*, which is about 600 per cent., the result entirely of increased wealth of the mine in her yield; but it will be long indeed before we can expect to see the shares of even the London and Westminster Bank rise up to such an extent, from legitimate and justifiable causes.

In another column we publish a report from the engineer dispatched to India by the EAST INDIA COAL COMPANY,—one of the few, and by far the most important, undertakings established and completely registered under the Limited Liability Act of 1855. We are happy to learn from the report that the statements made in the prospectus have proved correct; and when we consider to how great an extent England is indebted to her coal fields, we cannot but regard this company as one of material benefit, and deserving of the utmost legitimate support. This, however, it is certain to obtain, for the question of profit appears to have been placed beyond all doubt. In connection with the all-important subject of the manufacture of iron in India suitable for railway purposes, the question of good and cheap coal really becomes of great importance; it is of no less moment to the railway companies working in India. Whether they will run at a profit or loss will, in a great measure, depend upon how the fuel is to be got. Coke from England is a different matter to suitable fuel for the locomotives raised on the spot, and at one-sixth the cost.

THE MINING AND INDUSTRIAL INTERESTS OF CORNWALL.

[FROM OUR CORRESPONDENT IN WEST CORNWALL.]

SEPT. 18.—There have been many enquiries for shares during the past week, and the share market appears to be gradually reviving from its long depression. The standard last week maintained the rise it had previously gained, as compared with sales in July and August. The price of copper remains firm, and a rise is expected; but that must depend entirely upon the generosity or policy of the smelters. The trade is so complete a monopoly that the smelters can agree together, and even reduce the price to the miners whilst they increase it to the manufacturers. The miners are impatient of their bondage, but they do nothing as a body for their own relief. They take no steps for the formation of an independent smelting company. Still, they are glad to find that other parties are moving, and to see it announced in last week's *Mining Journal* that a prospectus will shortly appear for the formation of a new copper smelting association, with a large subscribed capital.

The Select Committee of the House of Commons on the Rating of Mines question have published the minutes of evidence adduced before them, and recommended the re-appointment of the committee in the ensuing session of Parliament. Seeing that the weight of evidence was undoubtedly against the policy and the justice of such a measure, one would have thought that the committee would not have been anxious to persevere in its ill-chosen object. But there are certain members of the committee whose obstinacy will not be easily driven back, and the mining interest may yet find that a new bill on the subject will be introduced into Parliament. Therefore they must not be asleep when the next session opens, but prepare to oppose a vigorous resistance to the further prosecution of the measure.

Amongst the mines for which there have been enquiries for shares has been Wheal Buller, at 300*l.* and 310*l.* per share. South Frances continues to open an excellent, and to all appearance lasting, mine; shares about 360*l.* Wheal Basset from 290*l.* to 300*l.*; North Basset, 37*l.* Alfred Consols is reported to have improved, and shares have advanced. Great Alfred is discovering some very productive ore ground. A large amount has been expended in the renewed working of this formerly rich mine, and it is hoped the adventurers will now be repaid for their perseverance. West Damsel is stated to have improved, and shares have sold at from 85*l.* to 90*l.* Wheal Margery is looking well; shares about 33*l.* Clijah and Wentworth is worked in a spirited way, and it is thought the cross-cuts may discover something valuable for the adventurers. Grambler and St. Aubyn continues to look promising, and the pitches are producing good quality ore; when Williams's lode is seen at a greater depth, good results are confidently expected. At East Alfred Consols and Wheal Hender there are indications of good mines, when further developed. South Seton shares have sold at 13*l.*, only 1*l.* having been paid.

The tin mines of the county appear to be doing better than the lead, and the advance in the price of tin will tend to give increased firmness to shares. Ding Dong have sold at 38*l.* East Rose shares have much declined.

Cornwall is not over supplied with banking accommodation. A report on the subject states that there are twenty-three banks, including branch banks, in the county, the distribution of which gives one bank to every 15,459 persons, taking the population as returned by the census in 1851. Of the different poor-law unions, Falmouth is best supplied with banking accommodation, having one bank to 10,524 persons, while Redruth has only one bank to 26,783. It is remarked that this inequality results from the rapid increase of population in the latter district, which had increased from 1841 to 1851 by 5520, or more than 10 per cent. The East Cornwall Bank has the largest business. The last published return showed that the notes issued by this bank for the week ending August 2, 1856, amounted to 90,965*l.* The Cornish Bank, at Truro, is the next in circulation, the notes issued in the same period having amounted to 46,140*l.* With regard to the savings' banks of the county, they are undoubtedly very beneficial to the mining and other working population; and they would be more so if the managers would institute branches in the more populous mining localities. The Truro Savings' Bank has set a good example in this respect by establishing a branch at Newlyn, in the vicinity of East Wheal Rose and other mines; and by making arrangements at Truro to receive small deposits on Saturdays, when working men receive their wages. The branch of the same bank in the St. Agnes mining district has been highly successful; so much so as to encourage other savings' banks to act on a similar principle, and to extend the beneficial inducements of such institutions to all the populous mining districts of the county.

The Royal Cornwall Polytechnic Society opened its annual exhibition yesterday, at Falmouth. The society has been in existence 23 years, and has, to a certain extent, answered its object, in the encouragement of

science, and the fine and industrial arts; but it has not, to the full extent, answered the expectations of its sanguine promoters. It was supposed, on its first establishment, that the society would be the means of stimulating the inventive genius of the working miners to such a degree that very many improvements and inventions would be brought forward, and be found applicable to mining processes. There have been a few useful machines introduced under the fostering encouragement of the society (the man-engine being one), but not many which have been found practically applicable to mining. A machine for improvements in tin-dressing was some years ago thought so efficient—looking at the model—that a medal was awarded to it; but the plan failed when tried on a larger scale in practice. Still, the society has good objects in view, and may yet be the means of producing something of great practical service. Among the premiums offered, there is one of 20*l.*, by the Editor of the *Mining Journal* and by the Society, to the originator of improvements in the dressing of ores; or for the most accurate account of the quantity of water found at different depths in the Cornish mines. Also another premium, by the Editor of the *Mining Journal*, for the best paper containing an account of any methods or plans practised in any other mining districts, advantageously applicable to the Cornish mines. Both these premiums have very useful objects in view; and, in reference to the latter, it is remarked that "the introduction of winding machinery, such as is employed in the best collieries of the North of England, appears to the committee to be worthy of attention in reference to this premium." There are other premiums for plans for effecting mine ventilation; for reports of the relative expenses of driving levels in granite or killas, "working big," and of ordinary height; and for other matters tending to the improvement of mining; all showing that the society is aiming, as one of its chief objects, to promote the good of the mining interest, for which reason it deserves the liberal support of the adventurers in Cornish and Devonshire mines. There is, this year, to be introduced at the annual exhibition a new feature. A geological excursion, under the guidance of some of the scientific gentlemen present, is to be made on one day, and on the next day a marine excursion, for the investigation of objects in natural history, including dredging for curious marine animals, &c. On a future occasion, I shall give a full account of the more important part of the Society's exhibition and proceedings.

THE IRON AND COAL TRADES OF STAFFORDSHIRE.

[FROM OUR CORRESPONDENT IN WOLVERHAMPTON.]

SEPT. 19.—The Iron Trade of this district does not manifest any symptoms of greater activity, nor do there appear satisfactory indications of any great improvement for the next few months. In fact, several of the leading houses have lately been for some time occupied with the completion of orders for the Continent, which require to be shipped immediately, so as to reach the ports before the Baltic rivers are closed by the frost; and the same remark applies to American orders for autumn delivery. Seeing, then, that orders have been but slack during the temporary flash, there is but faint hopes of an active demand during the next quarter. It is impossible to say whether, at the preliminary meeting of the trade to be held next Thursday, it will be decided to reduce prices or not, as the first houses are able to keep on their works, although few of them fully, as for the best purposes people will have iron of a well-known brand. I have repeatedly expressed my opinion that this district is not receiving its former share of orders, and many account for this by the great quantity of inferior iron—complete rubbish—which is produced, and which has had the effect of greatly lowering the character of Staffordshire iron. This same cause is operating in many branches of English manufacture, and if not checked will prove a serious injury to our commercial prosperity.

Mr. Bessemer's process was tested again on Friday last, but a great change appears to have come over the opinions of our ironmasters respecting it, the utmost said in its favour being that ultimately something may be made of it, but that at present its professions have not been realised, and that the process itself would be exceedingly expensive, from the constant necessity of rebuilding the cupolas, from the great heat to which the iron is raised. The experiments as yet have not been conducted in a manner calculated to afford satisfaction, and the sanguine expectations at first raised have yielded to, perhaps, exaggerated depreciation.

The Coal Trade is not brisk; the supply is large, and prices not likely to rise at present. The coalmasters west of Dudley, at a recent meeting at Stourbridge, fixed prices at 13s. best; common, 11s; lumps, 9s.; and fine slack, 3s. per ton; and a special desire to maintain a uniformity of price indicates the weakness of the trade.

A colliery explosion, in which a boy was killed and five men seriously injured, occurred on Monday last at the Oak Tree Pit, near West Bromwich, the property of the Messrs. Badger. The miners were driving through a fault, not having many yards to go, and were ventilating the face of the work with a fan, called in this district a "Blow George." On Monday morning they went down, taking, very properly, safety lamps, which indicated by the flame the presence of a large quantity of inflammable gas. This so alarmed the doggy, who was evidently quite ignorant of the nature of fire-damp, that he blew out the lamp, and in doing so drove the flame outside the wire gauze of the lamp, when an explosion instantly occurred. The poor lad who is killed was blown into the sump and forgotten, the rest in their fright leaving him there. This is another proof that educated miners are the great desiderata for the prevention of accidents. Had this doggy only had the merest glimpse of the principle of the Davy lamp, he would never have adopted the suicidal course which he took.

A meeting of mine agents and underground bailiffs of the South Staffordshire Mining District is convened at Dudley on the 29th inst., to take into consideration the propriety of recommending alterations in the present special rules for the management of collieries and prevention of accidents in mines, in consequence of the great responsibility endeavoured to be thrown upon them. The object is to render them less objectionable, and better suited to the requirements of the district.

A "Wolverhampton Correspondent"—albeit, it does not bear directly on mining or manufacturing questions—could not fail to record an event which has this week befallen the corporation of this town, which has tarnished the brightness of the civic mace, dimmed the lustre of the mayoral robe, and introduced a bar sinister into the borough arms. The corporation, some time ago, applied for an Act of Parliament to establish water-works. A private company oppose them, and the application failed, and too late it was discovered that they had no power to pay the expenses out of the rates. At length the fire-engines, the furniture of the Town-hall, and the police accoutrements, have been seized by the sheriff, and unless a remedy, as yet not discernible, be discovered, a sale of these effects will take place.

REPORT FROM YORKSHIRE, DERBYSHIRE, AND LANCASHIRE.

[FROM OUR CORRESPONDENT IN CHESTERFIELD.]

SEPT. 18.—An unusual degree of anxiety prevails with regard to the approaching preliminary meeting of the trade, as a number of large orders are known to be kept back to await the result of the decision of the ironmasters. The mills and forges in the district are fully employed, and the demand for merchant bars is on the increase. The orders now mostly given out are not large in extent, and indicate much caution on the part of the consumers. The shipments, both foreign and coastwise, exhibit a very satisfactory increase, and it is confidently believed that in the course of a short time the export trade will have materially increased. There is a division in opinion with regard to the future rate of prices, but the majority of the trade here are of opinion that it would be advisable to maintain present rates, as any further reduction in the price of iron must necessarily interfere with the wages of men, and prove a prolific source of dispute and disagreement.

The excitement occasioned by the invention of Mr. Bessemer is rapidly subsiding, and a belief is gaining ground that the merits of the process have been largely exaggerated. Some unsuccessful experiments made at Liverpool have tended somewhat to damage the reputation of the process. If Mr. Bessemer wishes to give the great bulk of the ironmasters an opportunity of witnessing the results of his experiments in the manufacture of malleable iron, no better opportunity could be afforded for doing so than during the holding of the quarterly meetings of the trade. There must be some great public experiment before the doubts of the sceptical can be removed.

The Coal Trade is gradually recovering from the depression which has hung over it during the whole of the present and a great part of the past year. The conveyance of this mineral on the Great Northern, Midland, Manchester, Sheffield, and Lincolnshire Railways is on the increase; so much so as to supersede a portion of the supply of sea-borne coals. It is well known that the Great Northern, and several other railway companies having termini in London, have for some time past been supplying the metropolis in the capacity of merchants, thus putting themselves in close competition with the London coal dealers. The effect of this competition has been to diminish the price of London coals from 5s. to 7s. per ton, and even more; and now the pressure of the competition is so severely felt by the coal merchants of London, that they are taking steps to induce the railway companies to confine themselves simply to the conveyance of the minerals. The cheap coal conveyed by railway, and sold at from 12s. 6d. to 13s. 6d. per ton, is unremunerative both to the colliery proprietors and the shareholders, and is displacing the sea-borne coals.

For several months past a reference has been proceeding before Mr. Henry Holt as umpire, wherein Messrs. Bray, Waddington, and Frankland, of Leeds, claimed compensation from Messrs. Terry and Cooper for damages by water in the colliery of Bray and Co., at Drighlington, in consequence of a trespass by Terry and Co. into their works; and Messrs. Terry and Co. also claimed damages from Messrs. Bray and Co. for an alleged trespass by the latter into the adjoining works of the former. The umpire awarded Messrs. Terry and Co. to pay Messrs. Bray and Co. 730*l.* 9s., and to do certain works to prevent further damages; and he decided that Bray and Co. had not done any damage to Terry and Co., and he did not award the latter any damages whatever.

An accident occurred last week at the Birley Vale Colliery, in a sinking shaft, which resulted in the death of two persons. The two deceased were engaged raising 3½ tons weight of pumps a height of 4 feet, by blocks and a rope 3 inches in circumference. It is supposed that one of the flanges caught a bearer, which caused the rope to break. The deceased were under the pumps. Blocks and ropes were very improper tackle to use for the purpose. A capstan and very strong cable rope, or proper screws, ought to have been used. The strain upon the block rope by the weight of pumps was two-thirds the weight the rope was capable of bearing, and its use was highly objectionable. We understand that no provision was made for a capstan at the colliery. It is to be hoped that more proper tackle will be provided for pumping shafts and raising large weights about the pits, and that this unfortunate accident will be the means of urging proprietors and managers to make better provision. Mr. Hedley, the Government inspector for Derbyshire, attended the pit, and made the necessary inspections and examinations; and at the inquest he urged the importance of the precautions recommended already to the attention of all colliery owners.

We have frequently referred to Derbyshire, as affording an excellent opportunity for the investment of capital in the further development of her mineral riches, and we have now the satisfaction to announce that a very rapid progress is being made with the new colliery and works at West Staveley, near Chesterfield, which will be the means of bringing a dense population to that hitherto secluded village. A very large colliery is being established by Messrs. Muschamp, Harrison, and Canter, and the sinkers last week reached the black shale bed of coal. There are two shafts, which were commenced about a year ago, 90 yards in depth and 9 feet in diameter, and executed under the direction of Mr. Harrison, M.E. The measures in some instances are of remarkable strength, there being several yards of rock and ironstone to pass through, which impeded the operations, but now proves of great advantage in forming a safe, strong roof. The seam is of superior quality, being virtually the old Silkstone, and there are 5 feet of pure coal, clear, strong, and bright in appearance. The proprietors have arranged for the working of 300 acres of this coal field, from which there is a communication, by means of a branch line, to the Midland Railway, at less than half a mile from the shafts. The proprietors will shortly be ready to supply the London and southern markets. The building operations in the neighbourhood by private speculators are going on very rapidly, and before long the place will assume a very active and busy appearance.

[We are requested by the Butterley Iron-Works Company, Alfreton, to state that the remarks in last week's Journal, from our Chesterfield correspondent, to the effect that they had made satisfactory trials of Bessemer's process, and sent specimens of the iron so produced to an influential house at Sheffield to be tested, were not correct.]

STOCK, MINING, AND RAILWAY SHARES IN IRELAND.

[FROM OUR CORRESPONDENT IN DUBLIN.]

SEPT. 18.—Consequent upon the settlement of a very speculative account, prices here fell extremely low during last week; but the public are coming into the market as large buyers for investment, which has had the effect of now giving a good tendency upward, and within the last few days a considerable reaction has taken place, and Funds have risen fully 1¼ per cent. The share market was not much influenced by the fall in Stocks, but business was little more than nominal owing to the Stock Account settlement. Mining shares were rather in dull demand, but prices have rallied, and there are now buyers at the quotations. Banking and railway shares are firm, especially the former, all the accounts being good. The following are the latest quotations:—Consols, 94; New Three per Cents., 94⅛; Hibernian Bank, 32½; National Bank, 31¼; Royal Bank (ex div. and bonus), 21½; Patriotic Insurance (ex div.), 7⅝; Consumers' Gas Company, 8¼; Mining Company of Ireland, 14⅛; Belfast and Ballymena Railway, 54½; Cork and Bandon, 10¾; Cork and Passage, 13½; Belfast Junction (ex div.), 45½; Dublin and Wicklow, 6¼; Kilkenny Junction, 10¾; Midland Great Western (ex div.), 52; Waterford and Kilkenny, 6⅛; Waterford and Limerick, 25½.

I am glad to find that my remarks on the gypsum quarry at Lough Frea have not been without fruit, as I have received more than one query concerning it from parties who seem disposed to enter into the subject seriously, and see how they may be able to make this valuable property properly available. The only fault with the ground gypsum seems to be that it is, in fact, too good and too strong; for this reason 1 cwt. of it would be equal to 1½ cwt. of the ordinary plaster, though it can be sold at a profit for even a less price than what that ordinarily used fetches in the market. In fact, its purity is undoubted, and must be so when it has been tested practically by the architect of the Board of Works, and who has given a highly favourable opinion of its value. To any of your readers who may be interested in this matter, and who may wish to obtain all the necessary particulars, it is probably better for me to refer them to the proprietor's (Mr. E Shirley) engineer, Mr. F. Lisabé, C.E., of 2, Dame-street, Dublin, who will, I am sure, be happy to afford every information in his power concerning this valuable property.

The admirable article which a short time since appeared in the Journal, headed Slate Trade, No. 1, was penned in such excellent style, and bore so practically on its subject, as to meet with admiration; and as dukes, duchesses, and even queens, will be, I hope, soon transported out of this county for having so long remained in idleness, I hope that the clever writer of Slate Trade, No. 1, will act on the suggestion contained in the following letter, addressed to me by my old friend, "Irishman:"—

SIR,—It gives me sincere pleasure to see, by the observations of "Blue Vein," that our neighbours on the other side of the Channel are equally interested in the forthcoming of Slate Trade, No. 2; and I trust nothing will deter "Blue Vein," as well as the writer of of Slate Trade, No. 1, from following up the important subject, and giving the public the benefit of their experience. I shall, therefore, defer any remarks of mine on Irish flags and slates, feeling that I shall be greatly assisted by the practical articles which have been and are now promised. I shall shortly, with your permission, call attention to Irish marbles, freestone, iron ores, plastic clays, &c. &c.,—all at present, if not quite, almost neglected, yet offering such a splendid field for remunerative investment to the capitalist.—IRISHMAN.

THE CYMMER COLLIERY EXPLOSION.

Now that the inquest is over, and a verdict of manslaughter is recorded against the chief manager, the overman, and his three firemen, it may not be out of place to review some of the chief features of the subject, and to examine the grounds upon which the verdict has fallen upon these parties, and has left the colliery owner and the Government inspector unnoticed. The general condition of the colliery appears to have been most scandalously defective; the area of the upcast shaft only 10 feet, the workings dependent upon 72 doors. The rules of the colliery similar to those adopted in collieries yielding no fire-damp, and the workings carried on with naked lights, although the candles bore a cap of impure air from 1 to 2 in. long.

The nature of the furnace is not described, and it is difficult to understand the principle of working in the absence of a plan, but bratticed air would seem to have been a necessary expedient. The pit itself was insulated, and dependent upon brattice, although a communication could easily have been effected with another working pit. Mr. Dickinson, in his evidence, showed that certain rules in detail had been violated by the managers, and says that "If I had been inspector, and my attention had been called to it, I would have done my utmost to amend so bad a system." He is asked, "If the defective ventilation failed to attract the attention of the inspector, can you blame an ignorant fireman?" &c., which question Mr. Dickinson objected to answer.

Mr. Mackworth, who quitted the inspection in Dec., 1855, showed that he examined the pit in March, 1854, then only one-third the extent—that he pointed out the inadequacy of the means of safety, and made various suggestions to the agents, especially the communication with the new shaft, to which no objections were made, but nothing was done. A similar explosion had taken place at Middle Duffryn, which report was sent to Mr. Insole, with suitable remarks. On Oct. 20, 1854, he sent safety rules to Mr. Insole, and requested their adoption as far as applicable: these were handed over to Mr. Hay, his agent; still nothing was done, although the Act was coming into force—whereas the rules which were ultimately carried out are adapted for non-fiery collieries.

Hence we are left a good deal in the dark as to whether the rules of Mr. Mackworth were adapted to a fiery colliery, such as this is acknowledged to be; and whether the nature of this controversy was known to Mr. Evans when he passed the rules "which are adapted to a non-fiery colliery."

This point has not been dwelt upon in the evidence, neither has any stress been laid upon any duty which devolves upon the proprietor, who is made aware of the improvident state of his colliery, and cannot but have been cognisant that his principal manager was entirely unfit to direct so important a work; whilst he removes two officials of experience, and, in spite of the protests of his workmen, appoints as successors men whom the jury have declared to be guilty of manslaughter by ignorance or neglect.

As to the original cause of the explosion—on whose hands, or at what stall did the fire originate, a great deal of time has been needlessly spent; and however the law of the coroner may have exculpated the owner in a criminal point of view, the verdict will most assuredly bring him to book in case of civil action by the relics of the deceased. It is a lamentable fact, which came out during the investigation, that many other collieries in that district are founded upon similar principles. This colliery ought, undoubtedly, either have been worked with locked safety-lamps, or not at all. That is a very similar case in Lord Ward's colliery, near Oldbury, where the chief manager leaves a pit without ordinary precautions of rules of ventilation, but employs an ignorant butty collier, who, by an act of rashness, not only loses his own life, but immolates other ten unfortunate persons. Here the verdict was "Accidental Death," no one being to blame.

REMARKS ON MINING IN JAMAICA.—No. I.

BY GEORGE DARLINGTON.

Having now been engaged for some time in enquiring into the geological composition, mineral deposits, and ultimate mining resources of Jamaica, I think it may prove interesting to some of your readers to offer some remarks bearing on the result of my investigation.

In sailing from St. Thomas's to Jamaica, a careless observer of geological phenomena cannot but be struck with the general resemblance in the physical character of the various islands which pass under his observation, as well as in the similarity of the rocks which form their littoral margins—indeed, a geological description of one island can differ in no very material point from that of another; similar forces have acted upon each, rocks of like character occur, and bear generally an uniform relation. It is not, therefore, surprising that if in one metallic minerals are found another should also possess them; this is known to be the case from Virgin Gorda to Jamaica,—but with this important difference, that except in Cuba all attempts at obtaining ores in remunerative quantities have hitherto been unattended with success.

My own observations have led me to conclude that this hitherto unprofitable result is not owing to the strata being non-metalliferous, but to a want of perseverance, proper management, and a right understanding of true mining knowledge; combined with those illigitimate practices which too frequently characterise our foreign adventures. The stratified beds of Jamaica belong to the Silurian series; but large areas in the island are occupied with porphyry, granite (both albitic and syenitic), trap and greenstone, with gneiss and chloritic slate. The general arrangement of these rocks are somewhat thus—Silurian limestone occupies those elevated areas nearest the sea, and are usually flanked towards the interior by the various igneous and metamorphic rocks; while shales, slates, and sandstone form the true interior area.

The island is a remarkable instance of general upheaval, evidently caused by intense action, arising either from subterranean, volcanic, or other igneous forces, the more elevated stratra rising at angles of from 40 degrees to a vertical position, the elvation so formed obtaining the height of more than 8000 feet, as in the Blue Mountains, and from 4000 to 6000 feet in the range north of Kingston, of which St. Katharine's Peak forms the extreme highest point. The eastern, or windward, end of the island appears to be chiefly composed of Silurian shale, slate, and limestone, with an extensive series of silicious beds, precisely resembling the chert of the English mines; limestone, as is usual, forms the littoral rocks. This set of beds is well illustrated in the mine worked some time since by the Jamaica Mining Company, the Mount Vernon property, in Lucky Valley. This position is 13 miles from Kingston, on the Windward-road, and from the bare rocks, and the workings effected by this company, very good sections of this stratification are exposed. In a future letter, when treating on the mines in the island, I shall have occasion to further remark on these.

The beds at Mount Vernon lie at high, but various, angles, beside the silicious set; considerable areas of shale and slate also occur, which have a more uniform bearing and dip, the angle of which bedding is more horizontal than usual, being at about 18° of elevation. If from this point we pass westward towards Port Royal Mountains, we find limestone to occur again, but underlaid by granite and phorphyritic rocks. At Hope, in St. Andrew's, chlorite rocks occur, with much dark red sandstone and conglomerate; epidote occurs in large masses, forming a kind of epidotic rock, while the road from Botanic Gardens to Newcastle presents some very fine natural sections of red sandstone rock, gneiss, and Silurian slate; these, however, do not appear to be metalliferous. Further west, in stony hill, we have limestone, while in Mount Salus, adjoining, granite, phorphyritic and metamorphic rocks, highly metalliferous, occur. Similar formations occupy the intervening area between Mount Salus and the Clarendon Mines; while to the westward of these mines very large tracts of crystalline limestone occur, which appear to be totally devoid of mineral ores, and in which no mining operations have yet been carried on.

THE BESSEMER IRON—PRACTICAL EXPERIMENTS.

In reference to the series of experiments made on the iron produced by Mr. Bessemer, at Woolwich Dockyard,—as recorded in last week's *Mining Journal*, Mr. W. B Adams has addressed the following letter to the *Journal of the Society of Arts*:—

"F. E. W.," dating from Woolwich Arsenal, gives the first detailed account of experiments on forged iron produced by Mr. Bessemer's process which I have seen in print. The bar he describes is 2 in. wide and 5 in. thick. The bar alluded to by me was some 15 ft. long, 2 in. wide, and a bare half-inch thick, one end of which was bent round cold to a circle of 6 in. diameter, displaying considerable toughness, and being bent backwards, a piece was broken off, which was carried away by a friend of mine to experiment on. The fracture showed white and large grained crystals. I enquired where the iron was rolled, and was informed at "Woolwich Arsenal," being first tilted to a "bloom."

I enclose a piece of the bar, which has been partly cut through and broken. The broken part is crystalline, the portion between the break and cut is laminated, as described by "F. E. W." To the file the iron is perfectly soft, without "pins," or hard particles, and with the back edge of a penknife small filaments are easily removable; these are mechanical indications analogous to those of charcoal iron. The quality appears to be homogeneous, but the lamination shows mechanical separation of parts—that is, want of solidity or porosity. But, nevertheless, it takes a very beautiful polish. The chemical analysis is given by "F. E. W.," but it would have been more satisfactory had he given the comparative analysis of the other irons against which it was tested. Nothing is said of specific gravity—an important element.

In the breaking experiment Bessemer's iron proved crytalline, the other four were fibrous. It is, therefore, certainly very remarkable how closely the crystalline approaches to the samples of two of the best fibrous in strength, while it exceeds the other two. This is a very important matter, for granular iron is, for many purposes, preferred to fibrous, as for the tyres of railway wheels, wherein fibre laminates and treads out into strings, and is only endured in frosty climates, as Russia and Canada.

Those who have witnessed the casting of the ingots will have remarked that the blast which permeates the mass of molten iron is continued during the process of pouring out. In fact, it pours out aerated, like so much champagne, and is received in a cast iron mould, which tends to chill the mass on the outside, and leave the centre ready and hollow. Probably this plan has been adopted from its quality of showing the experiment rapidly, without having to dig the ingot out of the sand. The best plan has not yet been adopted for obtaining dense ingots. In castings, it is customary to let the metal rest before pouring out, and to cast with what is called a "head," squeezing out the bubbles below with weight of metal above. Even in brass this is done. But Mr. Bessemer's castings have hitherto, apparently, all been made so as to ensure the least density in the ingot. Globular pores appear to be squeezed flat in rolling, and to induce lamination, analogous to beating up small shot into a mass.

The experiment at Woolwich,—re-heating a cooled ingot—does not seem favourable to the production of dense non-porous metal. Once set, it is probably difficult to close the pores in the interior of a mass, just as it is difficult to make a cool rivet fill a hole. The external part feels the influence of a blow or pressure, which does not get to the interior.

Probably the best method would be, after allowing the metal to subside to cast it into heated moulds; to form a vacuum while subsiding, and to put the mass under pressure as soon as it may be set, and then transfer it to the hammer and the rolls.

What is fibre in iron? In wood, fibre is a mass of strings held together by a gummy substance, while in a woollen cord the fibres are held together by twisting. Probably, then, fibre in iron may be produced by some intervening substance separating the iron into strings in the process of squeezing. We do not yet understand this matter. Granular iron is probably the same as fibrous, with the difference that the intervening substance in fibrous iron lies in one direction in strings, and in the granular in broken strings lying in all directions. Molten gold, silver, copper, and lead, are as homogeneous when cast as when wrought, though not so dense. Probably iron, pure, and absolutely free from any other substance, may ultimately be got to the same condition. These considerations open up the question of what is crystallisation in iron. Lamination is striation in sheets; fibre is striation in strings; crystallisation is striation in irregular network. In neither case is the metal homogeneous; and this opens up the question whether the crystallisation is caused by the molecular arrangements of parts of pure metal, or by the interposition of some other substance. A question to be solved by the chemist, possibly, with the aid of a powerful microscope. But I think it will be found that each separate crystal is pure soft iron. These views are the result of simple thought, without the means of verification at hand.

The great fact of Mr. Bessemer's process is, that in a clay colander he produces, without fuel, an intenser heat than has before been produced with fuel; and by a rapid operation, without manual labour, a result of malleable iron ten times the amount of what has hitherto been produced, at considerable cost of fuel, by a slow process.*

Since the process became public, I have been informed that an amateur chemist has

* Not really without fuel. The carbon is fuel to chemical, but not manufacturing apprehension.

performed it on a small scale by very simple implements. Running down four ounces of cast-iron in a crucible, he poured it into the large bowl of a heated tobacco pipe, using the stem as a blow-pipe, till the process was complete. Any of your readers can try this simple experiment.

But it is a fitting proceeding for the authorities in Woolwich Arsenal to exhaust the subject. Without getting ingots from Mr. Bessemer, they should take the ores direct of various makes of iron, and

1. Reduce them by the ordinary process, and puddle them, or refine and puddle them.
2. Reduce them by the ordinary process, and then run the iron out in Mr. Bessemer's clay colander, and make it malleable.
3. Reduce them by the ordinary process, and then, with Mr. Bessemer's apparatus, subject the iron to every variety of gaseous substance.
4. Reduce them by the ordinary process, and mix the iron with lime and other substances in Mr. Bessemer's apparatus.
5. Vary the the length of time Mr. Bessemer's process is continued, from the commencement of scintillation to a period as long as heat can be kept up.
6. Reduce the ores, and mix them with all probable chemical substances in the ordinary furnace.
7. Provide for the subsidence of Mr. Bessemer iron by slow process, keeping it fluid as long as may be desirable.
8. Press samples of each iron in dies, to attain the maximum density.

"F. E. W." states that phosphorus and sulphur are found in Mr. Bessemer's iron in nearly the same proportions as in Blaenavon pig, from which it is prepared. Here are two indications of the course to be pursued—first, to ascertain whence comes the phosphorus and sulphur—from the ore, the fuel, or the fluxes; secondly, if heat be not sufficient to expel them, what chemical additions are required to neutralise them.

When the experiments are complete, tabulate them, giving the chemical analysis, specific gravity, tensional strength, torsional strength, ductility, rigidity under compression, power of resisting atmospheric oxidation, and comparative cost of production. The last six conditions are the conditions of general utility.

It will not be creditable to us nationally, if our public establishment, our chief arsenal, does not work out this great problem of exhausting the subject of iron production, conversion, and modifications. An individual has at his own cost turned over a remarkable leaf in the great Book of Nature, and literally, with "great labour and expense," given us a kind of Rosicrucian alembic, in which fire burns without fuel; and it is desirable that the national laboratory should advance more than *pari passu* with the individual manufacturers in the opening future, confirming or combatting the statements which individual interests may be supposed to bias.

Since the first reading of the paper before the British Association, experiment proper there appears to have been none by Mr. Bessemer, but a mere repetition of duplicate meetings before the thronging curious and the thronging interested. I am now informed that a hammer is about to be erected on the premises—not a steam hammer, but an air hammer—*i. e.* a hammer lifted indirectly by steam with a cam movement, and forced downwards by the elastic action of compressed air in addition to its own gravity. What is commonly called a steam-hammer is not really so, but simply a gravitation hammer, lifted by steam directly instead of indirectly. We shall thus get to the next stage in the process.

Belief in disinterestedness is not a weakness to which human nature is generally prone, and it would be but worldly wisdom in any one possessing such a weakness to deny it, and assume an interest if he have it not. If he cannot show an ostensible interest in any subject that he may advocate, he will be suspected of a concealed one, for the world firmly believes that "nobody gives nothing for nothing." In advocating this new process of iron making, I am fortunately able to fall in with the world's views, having a very strong interest in it, generally as an advocate for the substitution of iron for timber in buildings, by sea and land, and particularly in the application of it to the construction of my own "Suspender Girdle Rail," which will not then be merely as cheap, but considerably cheaper, in first cost than the wasteful timber structures: and if the "semi-steel" of Mr. Bessemer turns out to be a true process, we shall obtain a safe, cheap, and really permanent way.

I am interested in another thing, in which, I believe, I am backed by the generally chivalrous spirit of the English nation—that the inventor, who is our constant prop and stay (our watchman), vigilantly guarding us against falling into the condition of Chinese—should have fair play and ample remuneration.

If your readers will refer to the paper of Mr. Kenyon Blackwell, on Iron Manufacture, read before the Society of Arts, they will notice how very remarkably he hovers round the idea undiscovered process of Mr. Bessemer in all his remarks on iron puddling:—

"In some of the largest iron-making districts of Great Britain, the production of 1 ton of wrought-iron of inferior quality is only obtained by the consumption of nearly 1½ ton of crude or pig-iron."

"The defects in the boiling process are the following:—The wear and tear in the puddling-furnace which occurs in heating grey pig-iron, particularly that of the more fluid descriptions, the slowness of the operation, and the amount of manual labour which it entails to produce good results."

"It appears desirable to introduce between the blast-furnace and the puddling-furnace some intermediate process, which, like that of the *maxéage* practised on the Continent shall sufficiently decarbonise the grey pig-iron at a small cost in fuel and labour, and without entailing the enormous waste of the coke necessary, so as to enable it to be heated readily, and without difficulty, in the puddling-furnace."

I have one more remark to make, not on the humanity—because it is considered bad taste in trade to speak of humanity and to savour of humanitarianism, anti-cruelty to animals, and that "sort of thing," but on the mere score of political economy, what an important item it is in Mr. Bessemer's process to get rid of the necessity of employing human puddlers. To produce fuel and train a workman to the age of 20 costs a given sum. Puddlers are worn out at 40 years of age; other workmen last till 50 and 60. Therefore, the capital invested to "raise" a puddler is sunk and expended in 20 years, while the same capital expended on other workmen lasts for 30 or 40 years. Depreciation of human stock is a large item in puddling. I again beg to state that I am talking of political economy, and not humanity.

MANUFACTURE OF IRON AND STEEL—BESSEMER'S SPECIFICATION.—From the excitement exhibited with regard to this process, we insert an abstract of the specification of the patent, dated Feb. 12, which will no doubt be read with much interest by all connected with the manufacture of iron and steel. Mr. Bessemer's invention consists in the decarbonisation or partial decarbonisation and refinement of the crude iron which is obtained in a fluid state from the blast furnaces in which the iron ore is usually smelted, or the decarbonisation and refinement of crude pig-iron or finery iron, by first re-melting the pigs of crude iron or the plates of finery iron in any suitable furnace, so as to obtain fluid metal for the purpose of being created by the improved means, which consists in running the fluid iron into a close or nearly close vessel, formed by preference of iron, lined with fire-bricks or other slow conductor of heat. When the vessel is about half filled there is forced into and among the fluid metal numerous small jets of atmospheric air in a cold or previously heated state, or other gaseous fluid or matter capable of evolving sufficient oxygen to cause the combustion of the carbon contained in the iron, and thereby to keep up the required temperature during the process. The size or number of the jets or tuyere pipes by which the air or other gaseous matters are conducted into the molten metal should be proportioned to the quantity of fluid metal operated upon at a time, and may also vary with the condition or quality of the metal; thus, forge pig, or refined plate metal, will not require so much oxygen to complete its decarbonisation and conversion into steel or malleable iron as is required for the conversion of crude iron of the qualities known as No. 1 or No. 2 foundry iron, for which qualities of iron tuyeres having an outlet of about 20 per cent. more in area more those which are used for the white qualities of iron are preferred. The quantity of air admitted should, however, depend also on the quality of the iron, and the heat of the air or other gaseous matters used with the air or in lieu thereof. When using foundry iron of the quality known as No. 2, the inventor runs 1 ton of it into the converting vessel, in which it rises to a height of 1 foot above the orifices of the tuyere pipes; then forces into the fluid metal atmospheric air in its natural or unheated state, under a pressure of about 10 lbs. per square inch, and he employs from 6 to 12 tuyere pipes for the distribution of the air, the united area of the tuyeres being equal to two square inches. The quantity of blast admitted by this area of inlet will in general be found sufficient to effect the conversion of the crude iron into a malleable condition in about 30 minutes; but should it be preferred to use a mixture of oxygen gas with atmospheric air or steam, or to use steam alone, or any other gaseous fluid capable of evolving oxygen in lieu of atmospheric air, then the size of the tuyere pipes should be regulated according to the quantity of oxygen contained in such gaseous fluids, any excess of oxygen over that usually contained in atmospheric air will admit of a diminution of the tuyere pipes, while a deficiency of oxygen will render necessary a corresponding increase. The interior of the vessel may in some cases be heated by the waste gases of the blast-furnace, or by any other convenient means, previously to the crude iron being poured or run therein. But this heating up of the vessel will only be necessary at such times as the vessel is used with a new lining, which should be well dried, or at such other times as the vessel may be used after the process has for several hours been discontinued, in which case he prefers to re-heat the vessel, although the process may be conducted successfully in a vessel that is perfectly cold previously to the running in of the molten iron. He has discovered that if atmospheric air or oxygen is thus introduced into the metal in sufficient quantities it will produce a vivid combustion among the particles of fluid metal, and retain or increase its temperature to such a degree that the metal will continue fluid during its transition from the state of crude iron to that of cast steel or malleable iron, without the application of any fuel; the requisite high temperature of the metal by such mode of action being obtained by the oxygen uniting with, and causing a combustion of, the carbon contained in the crude iron, and also by the combustion of a small portion of the iron itself. It is preferable to mount the refining vessel or chamber on axes not situated at or near the centre of gravity of the said chamber, by which means the pouring out of its contents will be facilitated, and the spout kept in a proper position in reference to the mould during the time of pouring the fluid metal therein. The air may be introduced at the sides or ends of the vessel through small holes formed in pieces of well-burned fire-clay, so that by moving the chamber or vessel on its axes the holes in the fire-clay may be made to descend beneath the surface of the metal, or be raised above it, as desired. It must be observed, that the air or other gaseous matters must be compressed with a force greater than will balance the weight of a column of fluid metal of a height equal to the depth of immersion of the jets below the surface of the metal fluid. The claim is—"The conversion of molten crude iron or of re-melted pig or finery iron into steel or into malleable iron, without the use of fuel for re-heating or continuing to heat the crude molten metal, such conversion being effected by forcing into and among the particles of a mass of molten iron a current of air or gaseous matter containing, or capable of evolving, sufficient oxygen to keep up the combustion of the carbon contained in the iron till the conversion is accomplished."

EXPERIMENTS WITH BESSEMER'S IRON AT LIVERPOOL.—Some experiments have been made by Mr. Clay, the manager of Messrs. Horsfall's Mersey Steel and Iron Works (and the makers of the monster wrought-iron gun recently presented to the Government), into the merits of Mr. Bessemer's iron. The result was stated at the time to be unsatisfactory, and at the monthly meeting of the Polytechnic Society of Liverpool, held on Monday, the Chairman, Mr. E. Jones, said that a specimen of Bessemer's iron had been received, and tested so far by Mr. Clay, in the presence of Mr. Dawson and himself, and he regretted to say it had been far from satisfactory. The specimen submitted had all the appearance of burned and imperfect cast-iron. He might say it was rotten hot and rotten cold. Mr. Dawson corroborated this statement, and also said that he had been much disappointed in the result; the portion submitted to the rolling machine had proved in every way intractable. The Chairman added that he hoped ere long better results of this process would be manifested, but in the one to which he referred he was informed that the iron cost 6*l.* per ton originally, and after being operated on, as he saw it, he did not consider it worth 5*l.* per ton.

ALUMINIUM AN OBJECT OF TRADE.—This metal has already become cheaper than silver, and is sold in Paris at 300 fr. the kil., but being very light, it will reach five or six times the extent of silver. Very well made tea and coffee pots, spoons, &c., are already to be seen in the jewellers' shops in Paris.

WEEKLY LIST OF NEW PATENTS.

GRANTS OF PROVISIONAL PROTECTION FOR SIX MONTHS.—D. SUTTON, Banbury: Manufacture of cast-iron cooking kettles, and such like hollow ware.—J. GREGORY, Nelson-square, Surrey: Fish joint, or method of connecting rails.—M. E. BOWRA, Basinghall-street, London: Laying or placing of rails or chairs for railway and other purposes, in the shape of beds or springs or elastic sleepers.—T. P. HAWKINS, Birmingham: Manufacture of wire chain.—E. H. C. MONCKTON, of the Bengal Civil Service, and Chancery-lane: Blast furnaces for smelting ores.—F. LEVICK, jun., Cwm Celyn and Blaina Iron-Works, Monmouth: Improvements in the construction and working of blast-furnaces for the smelting or making of iron.—A. ARCHER, of Old Swan, Liverpool: Manufacture or preparing for use founders' charcoal blacking, coal dust, loam, and facing sand.—S. and E. HALLEN, both of Cornwall-road, Lambeth: Rolling metallic substances.—J. ROBERTS, Upnor, Kent: Stoppering or closing of jars, bottles, and other vessels, applicable also to the joining of earthenware and other pipes.—J. MOZARD, Dufour-place, Golden-square, Middlesex: Construction of miners' lamps.—W. BISHTON, Wolverhampton: Boats for inland navigation.—J. MORRISON and S. AMPHLET, both of Birmingham: Fastening for belts, bands, and other such like articles.—C. J. DUMERY, Paris: Steam-engines.—G. A. LEWIS, Bristol: Disconnecting and raising screw-propellers.—E. A. ROY, J. A. HALL, and W. T. BINNS, all of Camden Town: Means of insuring draught in smoke flues or chimnies.—W. KEATS, Liverpool: Process of reducing copper to the metallic state from ores and other materials containing copper, and in the furnaces employed therein.—G. ANDERSON, Queen's-road, Dalston: Combustion of tar and other similar matters in heating gas retorts, and in the consumption of smoke arising therefrom, and from other fuels used therewith.—J. L. TADEANEN, Trafalgar-square, Charing Cross: Smelting ores.—The Earl of ALDBOROUGH, Wicklow, Ireland: Aerial navigation, and in the apparatus connected therewith, parts of which are applicable to locomotion generally.—JOHN JOHNSON, Single-street, Mile End: Railway carriages.—P. WRIGHT, Dudley: Manufacture of anvils.—W. WILKENS, Baltimore, America: Revolving cylinder battery or cannon, and apparatus connected therewith.—P. A. le Comte de FONTAINE-MOREAU, 39, Rue de l'Echiquier, Paris, and South-street, Finsbury: Making artificial stone for statues and ornamenting purposes.—H. E. TROTTIER, 39, Rue de l'Echiquier, Paris, and 4, South-street, Finsbury: Improved portable bath.—P. ESTIVANT, Paris, and 45, Essex-street, Strand: Casting metal tubes.—J. FOWLER, jun., Havering, Essex: Machinery or apparatus for ploughing and tilling land by steam.—A. DALTON, Chester: Smelting ironstones and ores, and in furnaces used for that purpose.

HARDENING AND TEMPERING STEEL.—Mr. G. C. Thomas, of 67, Grace-church-street, has patented the hardening, tempering, and restoring steel, by applying to it, when heated, a finely pulverised compound of chloride of sodium, bi-chromate of potash, and prussiate of potash. For ordinary purposes the ingredients should be combined in the proportions of 21 parts of the chloride of sodium, 8 of bi-chromate of potash, and 8 of prussiate of potash. Variations in these proportions may be required by the differences in the qualities of steel operated upon; but the degree of modification must be learned by experience. The chloride of sodium may be used in combination with the bi-chromate of potash alone, as well as with the bi-chromate and prussiate. It may also be combined with any other material having the same chemical properties as these. In this case the proportions will be about 21 parts of the chloride of sodium to 16 parts of the other ingredients; the exact proportions varying, as in the first case, with the nature of the materials operated upon. The process of applying the compound differs according to the hardness and temper it is desired to impart, and also to the size and form of the article to be subjected to it. To illustrate the manner in which it is to be applied, he describes the treatment adapted to the class of tools having a square or nearly square cutting edge, such as taps, reamers, turning and planing tools for iron, cold chisels, drills, dies, &c., used for working iron and steel. The steel is slowly and evenly heated to a colour that would look red in the dark; it is then sprinkled evenly and freely with the composition, or in some cases (as in the turning and planing tools for iron, cold chisels, drills, &c.) dipped in the compound, and then replaced in the fire and brought slowly to a moderate cherry red, or a high cherry red, according to the temper required. The higher the heat, and the greater the quantity of fluid employed, the harder the tool can be made; and the more slowly and evenly the heat is applied the more perfectly will the flux be absorbed. The heating is continued until the flux has nearly dried off. The tool points should be kept rather out of the fire, in order that they may more perfectly absorb the compound. For the same reason, gear cutter teeth should not be heated too much, and should receive such a quantity of the flux that it may run in freely between the teeth. As a general rule, the part of the tool that is longest in coming to a given heat is benefitted by the longer time the flux is being absorbed. The time may in some measure be regulated by the quantity of powder applied. After having been sufficiently heated, and having absorbed its proper proportion of the flux, the tool is removed from the fire, cleaned by a broom or otherwise, and plunged into cold water and finished. If more than one heating is required, as may be the case with large reamers and the like, a second application of the flux takes place after the tool has been heated rather hotter than before, but not so much as completely to dry up the flux. The process may again be repeated, if required, until the article has acquired the proper condition (which can only be known by experience), when it is plunged into cold water and finished. The same treatment substantially is adopted in the case of tools having bevelled edges on one or both sides, or thin edges, as drawing knives, double plane irons, and scythes. The compound is applied with greater care, and only to the side or sides where the steel is; and the second heat should not exceed a dark blood red, reached slowly, so that the fluid may be gradually and perfectly absorbed. With regard to thin edged tools, it is considered best not to heat them above blood red, and then to dip them into salt and oil (say ½ lb. of the former to a gallon of the latter), instead of water. If the tools prove too hard they should be held over the fire until a slight change takes place in their colour. In light hardening steel, the composition is sprinkled on one or both sides where the hardening is required. Burnt steel is restored by the application of the same materials in a similar way. Mr. Thomas claims "the use of the chloride of sodium in combination with the bi-chromate of potash, with or without the prussiate of potash, for hardening and tempering steel, in the mode substantially as described."

RAILWAY AND OTHER BREAKS.—Mr. G. Napier, Bath-street, Glasgow, proposes a self-acting railway break, to come into action when any compression of the buffers takes place by reason of the retrograde force of the engine to the momentum of the train. The breaks consist of segments of suitable material suspended from joints from the framing, and opposed to the tyres of the several wheels; a link connects the lower end of the segment to the buffer head, so that when the buffer is forced inwards, the segment or break is brought forcibly in contact with the wheel, and so opposes its revolution. The buffer, when again allowed to extend, relieves the wheel from further pressure. If it is desired to back the train, it is necessary to prevent the action of the breaks: for this purpose a suitable pall or stop is fitted to each buffer, which, when dropped in between the buffer head and the framing, effects that object. These stops may either be dropped in or removed singly by hand, or by rope or rod communications, under the command of the engine driver. The second part of the invention relates to breaks for vehicles for common roads, and principally adapted for omnibuses or coaches carrying heavy loads. It consists of a break of rubbing service applied to one or both of the hind wheels of such vehicles, and supported from an arm or lever mounted in a suitable position on a cross shaft. This cross shaft has another lever in the middle, which is connected with a long rod carried forward under the pole. This rod has a joint central with the centre of the locking plate of the fire carriage, in order that it may be deflected in either direction on the fore carriage moving round, without throwing the rod out of action. This rod is carried forward to a sliding piece fitted on the point of the pole to slide to and fro some short distance. The chains or straps or other fastening from the horses' collars to the point of the pole, instead of being fixed thereto, are carried over two sheaves or pullies and back to the sliding piece before mentioned. The action of the break is this—when the horses are pulled up they strain upon the chain or strap of the collar, which forcibly pulls the slide forward on the pole, and with it the rod communicating with the break levers, bringing the breaks in contact with one or both of the hind wheels. In backing the carriage a stop is placed immediately under the coachman's box, and in communication with a raised knob in his footboard. By placing his foot upon this knob, and depressing it, he throws the stop into gear with the break rod under the pole, and prevents its movement in a longitudinal direction, whereby the action of the break will be suspended, and the carriage will "back," as in the ordinary manner.

EXCAVATING MACHINES.—Mr. W. J. Curtis, Sebbon-street, Islington, has invented an improvement in combining machinery for excavating land for constructing tunnels. For this purpose, a rectangular or suitable form of frame, of a size depending on the intended tunnel, is constructed, and is arranged, when placed in an upright position, to be moved forward by hydraulic pumps or mechanical means pressing against the work which has been completed. There are three uprights, the two outer ones have reverse screw threads formed thereon in such manner that a screw nut on each of them, when caused to rotate, shall ascend its upright, and then when it arrives at the end again descend. These nuts turn between two plates, which carry an endless chain, and chain wheels by which the chain is carried. The central upright is a shaft which gives motion to the chain wheels and chain. In order to cut or remove the land in front, the chain carries ploughs or cutters, which cut away the land in front as the chain is caused to move. The central upright or shaft is put in motion by a steam-engine, which moves on suitable rails up to the work. Rails are also laid as the work progresses, so that trucks may bring up bricks and materials to build up and form the tunnel, and the earth is raised into the empty trucks by suitable buckets or lifters, put into motion by the steam-engine.

CLEANSING STEAM-BOILERS.—Mr. T. Burton, Lincoln, has invented an "internal boiler cleaner or mud stirrer, for the effectual cleaning of steam-boilers from muddy deposits, and all kinds of sediments." The invention relates to the employment of a stirrer or agitator, for stirring up the sediments or deposits in steam-boilers of all kinds, whereby such sediments or deposits, when so agitated, may be run off through the mud-cock with facility. The improvement consists in fixing a stuffing-box at or near the bottom of steam-boilers, through which stuffing-box is passed a sliding-rod, on which is fixed a plate or piece of metal of larger diameter than that of the rod, so that when the latter is moved by a handle outside the boiler, it will form a stirrer or agitator, by which means the sediment is mixed with the water, and drawn out by means of a mud or blow-off cock, or any other similar outlet.

RAILWAY BREAKS, CARRIAGES, AND SIGNALS.—Mr. Henry A. Jowett, Kentish-town, has patented some improvements in railway breaks and carriages, and in signals connected therewith: they consist in producing nearly an instantaneous effect or stoppage of the wheel of the break-van, or other wheels to which the novel and improved apparatus may be applied, by a combination of two agents operated upon by a power created or obtained by the rotatory motion of the wheels of that carriage upon which the machinery is placed, as follows:—Mr. Jowett proposes to secure to the timber of the break-van, underneath the bottom or boarding, a wrought-iron vessel rivetted together, and capable of bearing a presure of 100 or 150 lbs. to the square inch. To this vessel should be attached a strongly made air-pump, with a plunger or piston and a connecting rod attached to it and to the strap or band of a small eccentric upon the axle of the wheels for pumping air into the aforesaid vessel, and thus obtain an unlimited power of compressed air. From the above air-vessel he proposes to carry a strong iron or brass tube to the top of the carriage, and to the end of said tube attach a steam whistle, thereby enabling the guard to communicate readily with the engine driver; and if requisite employ a metal tube placed on the roof of each intermediate carriage between the last van or break and the engine, and between each carriage place a flexible tube of India-rubber or other suitable material, and an elastic socket or metal bayonet joint, that when the train is put together a direct line of communication may be established between the last carriage or break and the engine, by means of a whistle placed within about 3 ft. of the driver, and a code of signals; he also proposes to carry a branch tube with a stop-cock to a cylinder of about 12 in. diameter, with a piston fitted water-tight, the rod of which is connected to the lever of the axle, which is now acted upon by rack pinion wheel and screw, to press tightly the wooden blocks against the tyres of the wheels. The cylinder, above mentioned, he proposes to use either with or without water, as may be desired, and by opening the stop-cock a pressure of at least 100 lbs. to the inch may be instantaneously brought into action upon the piston and blocks and wheels connected therewith, by means of a stop-cock formed with three ways, to shut which stops the communication with the compressed air-vessel, and opens a third way for a spring to return the piston, and removing the pressure of the blocks from the wheels, and also to allow the compressed air between the piston and stop-cock to escape.

HURST'S PATENT RAIL JOINT.—This invention, briefly noticed in our Journal of August 9, now in use on the London, Tilbury, and Southend Railway, at Grays, where it has been found highly satisfactory, is intended, as stated in the specification of the patent, to render the whole line of rail, though composed of many different lengths, as usual, one continuous and complete rail, as it were, and allow of the sleepers of the kind now in use (when used) being placed at uniform distances apart. The invention can be applied to double or single faced rails, and consists in giving a modified "scarf joint" form to the ends of each length of rail—that is, a scarf joint form with the addition of a tongue, which is the extreme projection of the rail, and which tongue, when the ends of two lengths are properly brought together, fits in the channel of the rail between the flanges, or in one form rests upon the lower flange only. The lengths are to be kept in place by the usual chairs and keys, and in addition to, or in substitution for them, there may be square or other suitable rivets or bolts passing through square or other suitable orifices in both lengths of rail at the joint part, which will not only prevent the vertical working, now found to occur at the joints, but will tend to preclude accidents occurring from the joints getting foul. As to the construction of this joint the inventor states that it might be made by cutting away the flanges to the extent required, re-heating the end of the rail, and placing it in a die to press it into form, or the steam-hammer or rolls might be employed.

GAS LIGHTING.—An entirely new feature in gas lighting is about to be introduced by the Provincial Gaslight and Coke Company (Limited),—that of supplying the whole of the fittings required, which the little experience they had had appears calculated to produce the most favourable results. The value, as an investment, of shares in existing country gas companies may be judged from a reference to the profits of but a few of them, but even then it must be remembered that each has a separate board of directors, an expense that will be avoided by the course to be pursued by the Provincial Company:—Brecon, 8*l.* 10s.; Stratford, 7*l.* 10s.; Kendal, 8*l.* 15s.; Leighton, 7*l.*; Liskeard, 8*l.*; Littlehampton, 7*l.* 10s.; Mansfield, 10*l.*; Mitcham, 10*l.*; Oundle, 7*l.* 10s.; Petworth, 9*l.* 10s.; Quordon and Mount Sorrell, 7*l.* 10s.; St. Neots, 8*l.*; Tiverton, 10*l.* The company intends to turn to more profitable account those products in gas manufacture which have hitherto been considered of little or no value; and it is anticipated that an additional revenue will arise from the company letting fittings, gas-cooking, and other stoves on hire, by producing an income, not only from rental, but from the increase in the consumption of gas.

COAL SINKING.—Mr. W. Coulson, of Durham, the eminent sinker, has just entered into a contract to sink to the Harvey coal seam at Coxhoe Colliery. This extensive coal district, the property of John Robson and Ralph Ward Jackson, Esqrs., has been proved to contain the very valuable Harvey coal, and is now about to be worked, to meet the largely-increasing demand from that district for the many iron furnaces erecting on the banks of the Tees.—*Sunderland Herald.*

SOUTH AND EAST TAMAR MINES.—It appears that there is little probability of ever forking the water in South Tamar, as it now rises and falls with the tides of the river. Much of the timber has come up the shaft from the 30 and 40 fm. levels, and also to the surface in the river. It is supposed that the various levels were destroyed when the water came in, so that even were it possible to stop the gap in the river all the old workings would be found destroyed. The stamps and machinery have been set to work to return the ore at surface, which, with the machinery and other effects, will probably be sold by auction. We are informed that the East Tamar Mine has also suspended operations. The water is rising rapidly, having broken through the slide in the level between this mine and the South Tamar. The water is already above the 60 fm. level, and rises fast. Men have been set to work to take up and save the pitwork, as in the event of the workings being resumed it will be easier to drop the lifts again than to use the present work after it remains in the shaft for any length of time. It is asserted that the working plans were regularly made up and marked. The measurements of every level were taken at South Tamar on the Friday preceding the accident, and the work marked on every plan. In considering the advisability of attempting to re-open the mine, it should be remembered that at one time it was estimated there was 80,000*l.* worth of ore ground laid open; of this ore to the value of 50,000*l.* has been taken away, and the continued workings have not proved equally valuable to that removed.

So many reports having been circulated respecting the unfortunate catastrophe at this mine, and the apathy evinced by those under whom the management was placed, that we readily comply with a request to give insertion to the following letter, from the *Plymouth Journal*, as recording the opinion of the working miners that no blame is attributable to the agents, for neglecting any particular warnings of danger:—

Beeralston, Sept. 10.—We, whose names are hereunto subscribed, have worked in South Tamar Consols the number of years set opposite our respective names, and we were very much astonished to see the paragraph in your last week's Journal respecting the sad accident that happened there, where it is stated that warning had been given of the falling in of large lumps of the bed of the river. This we positively deny. We have never seen nor heard of such a thing; had it been the case we should not have risked our lives to have worked any longer there. We believe the water broke in without the slightest notice, as nothing had been seen or heard more than is seen in other mines, and we can testify that it has not happened from want of caution, or timber, or any other materials, as we have been visited daily by the agents. There has been none of the lode taken away more than 5 fms. high above the 30 fm. level, which was very hard ground, and we believe the run which drowned the mine took place in the slide, and not in the lode. Sir, is there not an absurdity on the face of the statement? Is it possible to believe that the men who have been employed repairing levels through the mine would, if they knew the danger to exist, and had been denied materials for its repair, continue to work there? Would any of the hundred men who worked there continue to do so, knowing the danger of so doing? Would the agents show themselves so bereft of human feeling as not only to visit the mine themselves daily, but to risk the sacrifice of so many lives, knowing, moreover, what misery it must cause to so many widows and orphans had the accident taken place on a regular working day? In proof that we do not believe the statement contained in the paragraph alluded to, we affix our names:—

Men.	Worked in mine.	Men.	Worked in mine.
John Stephens	7 years.	Matthew Pascoe	7 years.
John Lampshire	6 years.	James Sampson	6 years.
Thomas Taskers	3 years.	Arthur Robarts	5 years.
John Bonds	7 years.	Wm. Odgers	4 years.
John Foot	7 or 8 years.	John Hooper	4 years.
Abraham Sleep	6 years.	Richard Genkin	6 years.
Daniel Gouge	8 years.	James Willice	5 years.
James Bennetts	12 months.	George Willis	10 months.
James Williams	10 months.	John Adams	7 years.
Samuel Spear	6 years.	Richard Truskett	6 years.
		John Truscott	6 years.

CHART OF LAKE SUPERIOR MINING DISTRICTS.—We have received, through Messrs. Dupee, Perkins, and Sales, our Boston correspondents, a very elaborate and beautifully finished chart of the Keweenaw Point, and adjoining mining districts on the southern border of Lake Superior, compiled and drawn by Messrs. Jno. C. Booth and E. J. Hulbert, from surveys made by Messrs. Hulbert and Lum, eminent mining engineers of the district. The dimensions of the chart are about 6 ft. × 4½ ft.; the property belonging to each company is most distinctly shown; and the whole is divided into 40-acre allotments, and coloured to show the geological character of the district. An equally elaborate work has not before appeared, and there can be no doubt that the compilers will reap an ample remuneration for their very efficient labours. To all interested in the prosperity of Lake Superior mines the chart will prove invaluable, and offers a fair opportunity for intending shareholders to decide whether the character of the country in which is situate any mine justifies the expectation that speculation therein will be attended with favourable results.

Mr. John Batters has furnished the following remarks on the Commercial and Mining business of the week, ending Friday night:—

After the severe panic downwards of the previous week, the tide of public feeling has set as strongly in the opposite direction during the last two or three days, and the late fall is now nearly recovered. Money continues in good demand, though at previous rates, and now that the last instalment of the loan is paid, and public confidence restored, we may confidently look for higher prices, though caution is to be recommended, till the future of the money market can be more clearly seen. Consols have risen from 93⅛ to 94⅜, 5, and close to-night 94⅜ to 94½. We have had no particular feature to note in the foreign market, with the exception of a rise in Turks of nearly 2 per cent. Turks, 102¾, 103; New ditto, 102¾, 103; Mexican, 22⅝, 22⅞.

Railway shares have greatly improved in price, and speculative sales have been supplanted by *bona fide* investments on the part of the public. Subjoined are the closing prices:—Birmingham, 103⅛ to 103½; Great Western, 64½ to 64¾; South-Western, 52½ to 52¾; Midland, 79¾ to 79⅞; Leeds, 97⅛ to 97½; Caledonian, 27 to 27⅛; Dover, 21⅜ to 21¾; York and North, 28⅜ to 28⅝; Berwick, 20 to 20½; Eastern Counties, 9⅛ to 9⅜; Luxemburg, 4¾, 4⅞; Northern of France, 39½, 39¾.

In banks and Miscellaneous stocks, a large business has been done. National Discount Company shares regained the fall, having risen from ⅜ prem. to ¾, ⅞, and leave off to-night—National Discount Company, ⅞ to ⅞ prem.; London Discount Company, ¼ dis. to par; Egypt Bank, 2 to 1¾ dis.; Ottoman Bank, 1⅜ to 1½ dis.; Omnibus, 3⅞ to 4.

Foreign mines still remain inactive, with very little business doing. United Mexican, 3⅝ to 3¾; Conaes, 3¾ to 3⅞, Fort Bowen, 1s. 6d. to 2s.; Imperial Brazilian, 2⅜ to 2⅞; St. John del Rey, 19½ to 20; Cobre, 57 to 59; Santiago de Cuba, 1½ to 2.

Dividend British Mines still continue to attract attention, with a large business doing during the week; the moving in some stocks, which were unduly depressed, has been very great, and we still look for higher prices. At Ding Dong a dividend of 2*l.* 10s. has been declared, showing on the present price of this stock an interest of 25 per cent. Alfred Consols, 15½ to 15⅝; Brynford Hall, 115 to 120; Devon Great Consols, 400 to 405; Ding Dong, 39 to 40, ex div.; Mark Valley, 5 to 5¼; Mary Ann, 40, ex div.; North Basset, 39; Providence, 61 to 62; Rosewarne, 65 to 70; Sortridge Consols, 2⅜ to 2⅝; South Frances, 360 to 365; Tamar Consols, 17*s.* 6*d.* to 18*s.* 6*d.*; Trelawny, 21; Vale of Towy, ⅜ to 1; West Basset, 30½ to 31½; Basset, 290 to 295; Buller, 330 to 335; Wheal Kitty (Lelant), 10½, ex div.; Wheal Margaret, 40 to 41; Wheal Wrey, 8½ to 8⅝.

Progressive Mines have also been in good demand, with a very increased business during the week. Great Wheal Alfred, after touching 15, 16, have to-day declined to 13, 14; this is not to be wondered at, considering the immense advance from 30*s.*, at which these shares stood some weeks ago.—Boiling Well, 8 to 8½; Collacombe, 45 to 50; East Basset, 42½ to 45; Eaglebrook, 21 to 22; East Wheal Russell, 15 to 20; East Rose, 8 to 10; Grambler and St. Aubyn, 45 to 50; Great Alfred, 13 to 14; Herward United, 37½ to 40; Lady Bertha, 14 to 15; North Wheal Robert, 30 to 31; North Frances, 10½ to 11; Porkellis, 10 to 10½; West Frances, 18 to 18½; Wheal Uny, 4¼ to 4½; Wheal Grenville, 2 to 2¼; West Collacombe, 1 to 1¼; Wheal Hender, 4⅛ to 4¾; Wheal Ludcott, 30*s* 31; Wheal Zion, 15.

ROYAL BRITISH BANK.—Mr. Effingham Wilson, of the Royal Exchange, has published a revised list of shareholders in this unfortunate concern, with remarks and observations upon the legal position of the parties. This must prove of interest to depositors, or others interested in the bank, and also to those who feel desirous of knowing who has incurred liability, its extent, &c.

THE CYMMER COLLIERY EXPLOSION.—The several parties against whom verdicts of "Manslaughter" were returned by the jury at the late inquest have put in bail for their appearance at the next Swansea Assizes. All the colliers of the valley were present, and many did not disguise their dissatisfaction at the limited bail required.—*Haverfordwest Telegraph.*

SOUTH EASTERN RAILWAY.—CONTRACT for the SUPPLY of STORES from 30th Sept., 1856, to 31st March, 1857. The directors are prepared to receive TENDERS for the SUPPLY of the undermentioned STORES, viz.—

No. of contract.	No. of contract.
1. Oils, tallow, turps, &c.	8. Varnish, paint, drysaltery, &c.
2. Iron, axles, tyres, forgings, &c.	9. Ropes, canvas, bags, cotton waste, felt, &c.
3. General ironmongery, tools, &c.	10. Coach trimmings, carpeting, cloth, horsehair, towellings, &c.
4. Files, steel, springs, &c.	11. Leather, hose-pipes, straps, &c.
5. Sheet brass, brass and copper tubes, finished brasswork, &c.	12. Brushes, brooms, mats, &c.
6. Tin, tinwork, lead, zinc, and other metals.	13. Timber, deals, woodwork, &c.
7. Glass, lamps, lamp materials.	14. Sundries.

Specifications and forms of tender may be had on application in writing to the storekeeper, London Bridge Terminus.

Forms of tender for each contract are printed separately, and parties applying should state the particular contract for which they propose to tender.

Patterns may be inspected, on and after the 22d inst., at the Stores Office, Bricklayers' Arms Station; and any further information required may be obtained at the Storekeeper's Office, London Bridge Terminus.

Tenders to be returned on or before the 29th inst., endorsed "Tenders for Stores," addressed to the secretary, London Bridge Terminus. S. SMILES, Sec.

London Bridge Terminus, 18th September, 1856. 66

CALEDONIAN RAILWAY COMPANY.—At the TWENTY-THIRD HALF-YEARLY GENERAL MEETING of the Caledonian Railway Company, held at the Merchants' Hall, Glasgow, on Wednesday, the 17th day of September, 1856,

WM. JOHNSTON, Esq. (Chairman of the Board of Directors), in the chair,

The advertisement calling the meeting having been read, the common seal of the company was attached to the registers of proprietors, in presence of the meeting,

The following resolutions were passed:—

1. That the report of the directors, together with the balance-sheet and statements of accounts, laid before the meeting be received and adopted; and that dividends be now declared for the half-year ending 31st July, 1856:—On the preference stock of the company, at the rate of £4 10s. per cent. per annum; on the 4 per cent. preference half-shares, at the rate of £4 per cent. per annum; on the 5 per cent. preference half-shares, at the rate of £5 per cent. per annum; on the preference quarter-shares, No. 2, at the rate of £5 per cent. per annum; and on the consolidated ordinary stock of the company, at the rate of £1 per cent. per annum, less income tax in each case, and all payable on the 1st of October next.
2. That Col. Frederick Brandreth, Hyning, Kendal, be elected one of the directors of the company. 67
3. That John M'Dowall, Esq., Ironfounder, Glasgow, be elected one of the directors of the company.
4. That Phillip Black, Esq., Glasgow, be elected one of the directors of the company.
5. That Thomas Hill, Esq., registrar of sasines, Glasgow, be elected one of the directors of the company.

WM. JOHNSTON, Chairman.

The thanks of the meeting were unanimously voted to the Chairman, for his conduct in the chair.

A. GIBSON, Sec.

TO BE SOLD (as a going concern), pursuant to an Order of the High Court of Chancery, made in the Causes of "MOLD v. MOLD," and "MOLD v. MOLD," with the approbation of the Judge to whose Court the said causes are attached, at the King's Head Hotel, in the town of Derby, on Tuesday, the 7th day of October, 1856, at Four of the clock in the afternoon precisely, the valuable FREEHOLD and LEASEHOLD PARTNERSHIP PROPERTY, IRON and COAL MINES, COLLIERIES, and OTHER WORKS and BUSINESSES, LANDS, TENEMENTS, and HEREDITAMENTS, of and belonging to the late partnership firm of Messrs. CHARLES, CHARLES JOHN, and WILLIAM HENRY MOLD, situate at Morley Park and Alderwasley, in the county of Derby.

Printed particulars and conditions of sale, and all further information and particulars required, may be had gratis, in the country, of Messrs. MILNES and NEWBOLD, solicitors, Matlock, Derbyshire; Messrs. SIMPSON, solicitors, Derby; Messrs. DIBB, ATKINSON, and PIPER, solicitors, Leeds; Mr. STONE, the managing receiver, The Wardwick, Derby; and in London, of Messrs. BOYS and TWEEDIE, 6, Ely-place, Holborn; Mr. W. G. TAYLOR, solicitor, 24, John-street, Bedford-row; and Messrs. HAWKINS, BLOXAM, and HAWKINS, solicitors, 2, New Boswell-court, Lincoln's Inn; and of the auctioneer, The Wardwick, Derby. HY. LEMAN, Chief Clerk.

BOYS AND TWEEDIE, 6, Ely-place, London.
MILNES and NEWBOLD, Matlock, Derbyshire. 68

MINE AND MATERIALS FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT, the WHOLE of the PLANT and MACHINERY of CROW HILL MINE, St. Stephen's, Cornwall, now in good working order, together with the LEASES of the same, of which about 16 years are unexpired. It comprises powerful WATER WHEELS that are used for all the purposes of drawing water, winding and crushing, suitable PITWORK, with convenient SURFACE ERECTIONS, and the usual PLANT of MATERIALS to be found in a mine well laid out for prosecution. This mine possesses the advantage of a full stream of water, equal to very extensive requirements, at a mere nominal rent. It has been partially worked, and produced some considerable quantity of rich silver-lead ore at the shallow levels, and requires only a small further outlay to prove the lode deeper.

The agent on the mine will give every facility for inspection, and further particulars may be known by applying to Captain PUCKEY, St. Blazey; or Mr. WILLIAM BROWNE, of St. Austell; and tenders will be received by W. C. FOULKES, Esq., 58, Old Broad-street, London, on or before the 30th inst.—Dated Sept. 16, 1856. 69

GLAMORGANSHIRE.—FREEHOLD MINERAL PROPERTY. FOR SALE, BY PRIVATE CONTRACT, ALL the several VEINS of highly BITUMINOUS COAL lying under the FARM of YSTRAD-ISSA, in the parish of Swansea, together with the said FARM, which consists of about 120 acres of ARABLE LAND, now let to a respectable tenant. The property contains four veins, of the thickness of 3, 4, 5, and 6 ft. respectively, and is adjacent to the South Wales Railway, which passes on the west and south sides of it. Some of the veins are worked by collieries now in full operation on the adjoining properties.—For further information, apply to Mr. W. LEYSON, Neath, Glamorganshire. 70

TO IRON SHIPBUILDERS.—TO BE SOLD, BY PRIVATE CONTRACT, ALL those valuable and extensive PREMISES, lately occupied by Messrs. Coutts and Parkinson, situate at WILLINGTON, near Newcastle-on-Tyne, with the necessary MACHINERY and APPLIANCES for carrying on an extensive business in IRON SHIPBUILDING. The premises possess a large river frontage, and offer in every way a most favourable opportunity for commencing the above business, for which the Tyne has now established a reputation equal to that of any port in the kingdom.—Further particulars may be had on application to Mr. P. H. STANTON, solicitor, Newcastle-on-Tyne. 71

SLATE QUARRY.—Mr. WESTON is instructed to OFFER a SLATE QUARRY at Coins, in Merionethshire. It is a truly good concern, the terms are easy, and the amount required for working very moderate.—Address, H. WESTON, mine broker, &c., Machynlleth. 72

SLATE QUARRY, NEAR ABERDOVEY, MERIONETHSHIRE. —TO BE LET, with immediate possession, a SLATE QUARRY, within a few miles of the Port of Aberdovey. This quarry, which is partially opened, is to be let in consequence of the death of the late lessee.—Apply to Mr. HUGH MORGAN, land agent, Machynlleth, Montgomeryshire. 73

COAL FIELD.—TO BE LET, in the township of Ewloe, parish of Hawarden, county of Flint, ALL the COAL now lying under the SANDYCROFT FARM, containing 40 acres of land, within a ring fence, belonging to Mr. Charles Baxter, in the occupation of Mr. Thomas Ellis.

By a late survey, it appears certain that 100,000 tons of coal, principally Main Coal, may be raised on the deep side of the mine from a pit 120 yards deep, drained to 86 yards, and nearly free of water; and 220,000 tons (more than two-thirds Main Coal) on the rise side of the mine from a pit about 70 yards deep, in addition to the coal left in former workings between crop and dip; the whole requiring only a moderate capital to open the mine, and bring the coal into market.

With the above-mentioned seams will be LET the ENTIRE SEAM of 4½ ft. coal, lying about 70 yards below the Main Coal, estimated to be upwards of 200,000 tons, of the quality now raising by the Ewloe Hall Colliery Company, from the adjoining lands of Sir George Prescot, Bart., and which may be advantageously wrought from the pits found necessary for winning the Main Coal of the district.

This coal field is advantageously situated for commanding an extensive sale, being in the neighbourhood of the Buckley Potteries, within 1½ mile from the Chester and Mold Railway, 3½ miles from the Chester and Holyhead Line, and three miles from Queen's Ferry.

The proposed royalty is moderate; and further information, with a view of the geological plan and sections, may be obtained from JAS. GREGORY, colliery valuer and surveyor, Ness, Neston, Cheshire. 74

TO LET, an old and valuable TIN and COPPER MINE, known as the WHEAL UNION, with a range of 90 acres of land, situated within two miles of the Stannary town of Ashburton, Devon. It has been worked for centuries by water-power only to the depth of about 50 fms., having numerous shafts and adits; but a deficiency of water now renders a steam-engine necessary, which is the main expense requisite to produce an immediate return, power only being required to clear the mine of water to work the lodes at once. The ores sold by a former company, obtained by inadequate means from this and the adjoining property, produced £13,977 in less than three years, raised at an average tribute of less than 10s., or half profit, clearly showing what could be done by steam-power. The strata consists of grey killas, or clay-slate, so proverbial for richness in tin and copper lodes. There are three lifts of pumps and rods in the engine-shaft; also, counting-house, &c., on the premises. The terms to a responsible party will be liberal.

For particulars, apply personally, or by letter, to S. P. KNOWLES, Esq., 32, New Park-road, Stockwell, Surrey, where plans, specimens, &c., may be seen. 75

TO THE SHAREHOLDERS OF THE UNITY GENERAL ASSURANCE ASSOCIATION.

(EXTRACTS FROM THE BOARD MINUTES.)

A Circular from Mr. J. J. Mechi, dated Sept. 16, 1856, and addressed to the shareholders, disclosing his intention to appoint, subject to the confirmation of the shareholders, a new Board of Directors, and to reinstate Mr. T. H. Baylis as general manager, having been read,

Resolved:—

That this Board is of opinion that Mr. T. H. Baylis is the sole cause that the affairs of the Association are at present at a complete stand still, and that the confirmation of the act of the Board, accepting his resignation, by the general body of the proprietors, is the only means by which your institution can recover from the serious injury that he has inflicted on them.

That this Board cannot recommend to their proprietary any such premature delegation of their own functions to any individual shareholder, who has only recently taken shares in your institution, as that recommended by Mr. Mechi, and especially to one who has publicly declared his determination to support your late Managing Director, whether right or wrong, and who is completely identified with him, and whose time and attention ought necessarily to be engaged by his many other occupations.

That this Board would earnestly impress upon their constituents the necessity of fearlessly assuming and exercising their own powers, irrespective of party influences, at the next general meeting, which shall be held at the earliest possible day.

By order of the Board, F. L. H. COLLINS, Sec. pro. tem.

Chief Offices, Unity-buildings, 9, Cannon-street, City, London, Sept. 18, 1856. 76

MESSRS. DAWSON AND KNIGHT WILL SELL, BY AUCTION, at Garraway's Coffee House, Change-alley, Cornhill, London, on Tuesday, the 23d day of September, 1856, at One o'clock precisely, in One Lot, ALL that MINING PROPERTY known as the PERRAN AND GREAT WHEAL LEISURE UNION MINES, situate in the parish of Perranzabuloe, in the county of Cornwall, together with the ENGINE-HOUSES, STACK, and BOILER-HOUSES, and other useful and requisite BUILDINGS, with the PLANT thereon, including one 80 in. cylinder steam-engine, and four boilers, complete; one 24 in. cylinder (double) winding engine; and all other the MACHINERY and MATERIALS now on the said mines, comprising all that is necessary for effectually working and carrying on the said mines.

These mines are held on leases from His Royal Highness the Prince of Wales and Duke of Cornwall, the Right Hon. Viscount Falmouth, John Samuel Enys, Esq., and John Oates, Esq., and others, and have been worked only about four years, during which period the adventurers have expended thereon about £33,000. All the machinery and materials were purchased new, and they are now in a good and substantial state of repair.

These extensive mines and the materials and machinery are offered in One Lot, to give capitalists an opportunity of obtaining a property which they may at once proceed to develop.

May be viewed at any time previous to the sale, on application at the mines; to Capt. JOHN TONKIN, of Pool, near Camborne, and Capt. CHAS. THOMAS, of Dolcoath Mine, the agents of the mine; to the auctioneers, at their offices, Mortimer-street, Cavendish-square; or to the secretary, at the offices of the company, 33, Broad-street-buildings, London. Particulars and conditions of sale may be obtained on application to Mr. ARUNDEL ROGERS, solicitor, 33, Old Jewry, London. 77

BRISTOL.—MOST IMPORTANT SALE OF ELEVEN VALUABLE HYDRAULIC PACKING PRESSES, AND PUMPS FOR DITTO (by Bellhouse, of Manchester), SHAFTING, GEARING, MACHINERY, AND EFFECTS.

MR. WHEATLEY KIRK, of Manchester, is honoured with instructions from the proprietors, John and Alexander B. Freeland, Esqrs., to SELL, BY AUCTION, on Monday, the 6th of October, 1856, commencing at Eleven o'clock, on the premises known as the Hay Stores, St. Philip's, Bristol, the following valuable HYDRAULIC PACKING PRESSES, PUMPS, MACHINERY, &c., rendered in disuse by the close of the war, viz.:—

1 capital hydraulic press, 15 in. ram, complete.
2 capital hydraulic presses, 10 in. ram, complete.
2 capital hydraulic presses, 9 in. ram, complete.
6 capital hydraulic presses, 7 in. ram, complete.
2 sets of pumps for working the above, 2 in. and 1⅛ in. respectively. 78

Also, 1 hydraulic press, 7 in. ram, incomplete; and 1 ditto, 10 in. ditto; together with a quantity of shafting, pulleys, machinery, and other valuable effects.

For full particulars, see catalogues, which will be ready for distribution shortly, and may be had at the place of sale in Bristol; or at the offices of the auctioneer, Cross-street Chambers, Manchester; or will be sent free by post on application.

PRELIMINARY ANNOUNCEMENT.
BANK QUAY FOUNDRY, WARRINGTON.

MR. WHEATLEY KIRK is instructed to SELL, BY AUCTION, early in October next, the WHOLE of the exceedingly valuable TOOLS, UTENSILS, MACHINERY, GUN MILLS, STEAM-ENGINES, BOILERS, &c., on the premises. Further particulars in future papers.

Auctioneer's Offices, Cross-street Chambers, Manchester. 79

SPLENDID DOUBLE BEAM PUMPING ENGINE, QUITE NEW, and TO BE SOLD only on account of a larger one being required. The cylinder is 52 in. bore, and stroke 8 ft., metallic piston, rod 4½ in. diameter, beam weighs 11 tons.—Apply to WHEATLEY KIRK, engineer, and engineering auctioneer and valuer, Manchester. 80

VALUABLE FREEHOLD AND MINING PROPERTY.
LAMERTON, DEVON.

MESSRS. DAVIS, SON, AND VOSPER, WILL SELL, BY AUCTION, at the Exeter Inn, Tavistock, on Friday, the 3d day of October next, at Four o'clock in the afternoon (unless previously disposed of by private contract, of which due notice will be given), subject to conditions to be then read:—

LOT 1.—ALL that valuable FREEHOLD ESTATE (exonerated from the tithes of corn and hay), called WOODMANSWELL, containing 90 A. 1 R. 15 P., or thereabouts (be the same more or less), with THRIVING TIMBER and COPPICE thereon; situate on the high road leading from Tavistock to Lydford, in the parish of Lamerton, Devon, a dry and healthy part of the country, and about six miles from Tavistock, and nine from Okehampton, two good market towns, and now in the occupation of Mr. John Veale, under a lease for 14 years, determinable at seven, from Michaelmas, 1852. There is a good dwelling house on the estate, with all necessary offices and suitable outbuildings. This estate presents an unusual opportunity for investment, as, independent of the beauties of the scenery (being within a very short distance of the celebrated Lydford Cascade), and the richness of the surface, no doubt is entertained of the mineral value of the sub-stratum, as some years since a mine was opened with every prospect of success, which is shown by the fact of 11 tons of rich copper ore having been produced from a shaft about 7 fms. deep, and which sold at £10 per ton. The mine, however, was ultimately abandoned by the adventurers, from want of funds to carry out the necessary operations. This valuable mine was known by the name of Wheal Susan; and there is little doubt but that with a small capital, judiciously expended, a handsome return might be made.

LOT 2.—ALL that THRIVING OAK COPPICE, called WATERVALE and PRESCOMBE WOODS, containing 5A. 0R. 2P. (be the same more or less), adjoining the above, also freehold (exonerated from the tithes of corn and hay), and which will be sold either separately or with Lot 1, to suit the convenience of purchasers. The timber and coppice to be taken at a valuation, in the usual way.

Mr. JOHN WILLIAMS, on the premises, will show the property; and plans and reports of the mine may be seen, and all further information obtained of Mr. HENRY COWLARD, solicitor, 14, Lincoln's Inn-fields, London; or at the offices of Mr. JOHN D. WEEKES, solicitor, Tavistock, Devon.

Dated Tavistock, Sept. 9, 1856.

GREAT BEAM TIN MINE, NEAR ST. AUSTELL.

MR. BURGESS is favoured with instructions to SELL, BY AUCTION, in October next, of which due notice will be given, the WHOLE of the MATERIALS belonging to the above mine, consisting of the following:—One 50 in. cylinder PUMPING ENGINE, 9 ft. stroke, with two boilers 22 to 23 tons; 1 capstan and shears; 1 capstan-rope; 1 30 in. cylinder stamping engine, 8 ft. stroke, with one boiler about 9 tons; cast-iron axle, with tappets and stamping gear, having 24 heads, complete; 120 fms. pitwork, 8 in., 10 in., 12 in., and 20 in., principal part 12 in.; 36 ft. water-wheel, 2 ft. breast, with double acting drawing gear, complete, and about 500 fms. chain, ⅝ and 9-16; 3 water stamps; 2 wheels, 12 ft. high, 2 ft. breast; 1 13 ft. and 2 ft. breast, new; with large quantity of materials necessary for working an extensive tin mine, a detailed description of which will be given in the catalogues and handbills. 82

Mr. BURGESS can with confidence state that the engines and materials throughout are of the very best description.—Dated Burncoose, Redruth, Sept. 15, 1856.

CHEADLE, STAFFORDSHIRE.—TO COPPER, BRASS, AND SPELTER MANUFACTURERS, AND MILLOWNERS.

MESSRS. EDWARDS WILL SELL, BY AUCION, at the Royal Oak Inn, Cheadle, in the county of Stafford, on Friday, October 3d, 1856, at Three o'clock in the Afternoon, subject to conditions to be then produced, the undermentioned valuable FREEHOLD PROPERTY, situated at the Brass-Works, near Cheadle, in the county of Stafford, in the following and such other lots as may be agreed upon at the time of sale.

No. on plan.	Description of property.	Quantities. A.	R.	P.
	LOT 1.			
1	A close of land, called the Slang	0	0	34
	LOT 2.			
2	Garden	0	0	17*
3	Ditto	0	0	8*
4	Ditto	0	0	10*
5	Ditto	0	0	16*
6	A close of land, called Stable Field, in the occupation of A. Blagg, Esq.	1	1	9*
7	A dwelling-house and garden, in the occupation of Widow Hall	0	1	10*
8	All those extensive and commodious copper and brass works, with water, crushing-mill, melting-house, washhouse, charcoal-house, pot-chambers, and large warehouses, blacksmith's shop, and other conveniences; also two workmen's cottages; the whole including the extensive yards, &c., containing (* Total 4a. 2r. 19p.)	2	2	29*
	LOT 3.			
9	All those valuable and extensive copper and spelter smelting-works, with roaster, furnace, and other conveniences, and possessing the advantage of a chimney-shaft of great elevation, commanding an immense draught for the furnaces; also various buildings, and two workmen's cottages; containing, including the extensive yards (as now staked out)	4	2	10
	LOT 4.			
10	A genteel dwelling-house, with convenient out-buildings, and garden fronting to the turnpike-road from Stone to Cheadle, in the occupation of Mr. John Keys (as now staked out)	0	3	8†
11	A close of excellent pasture land, called the Riddings, having a considerable frontage to the turnpike-road from Stone to Cheadle ... († Total 4a. 2r. 8p.)	3	3	0†
	LOT 5.			
12	Osier-bed	0	3	4‡
13	A close of excellent meadow land, called Berridge Field	3	1	3‡
14	Plantation	0	0	22‡
15	Dwelling-house, carpenter's shop, stable, and garden, fronting to the said turnpike-road from Stone to Cheadle, in the occupation of William Inskipp (as now staked out) (‡ Total 4a. 2r. 7p.)	0	1	11‡

LOT 1—Is well situated for building purposes. 83

LOT 2—Affords a good site for the erection of a silk or other mill requiring a large number of hands, which might be obtained at moderate wages; part of the buildings on this Lot might if desired be converted into cottages at a small expense. The present affords a favourable opportunity for entering upon the business of a copper and brass smelter, which has long been carried on at the works now offered for sale.

Plans of the property may be inspected at the place of sale, at the office of Mr. CHARLES SMITH, jun., Land Surveyor, Alton, near Cheadle, and at the office of Messrs. WARD, SON, and COLLIS, Solicitors, Newcastle-under-Lyme, from either of whom further particulars may be obtained.

LAND AND MINES.—TO BE LET, OR SOLD, an ESTATE called HOUGHWOOD, situate in the parish of Stoke-upon-Trent, Staffordshire, and about four miles from Hanley, and containing 76 acres, or thereabouts, with the dwelling houses thereon.

There is every reason to believe that this estate abounds in IRONSTONE. A shaft has been sunk about 6 yards on a part of the estate, and several bands of ironstone were passed through, varying in thickness. The canal adjoins the estate, and a tramway may be made from the shaft to it with the greatest ease.

Applications to be made to Mr. COPE, mine agent, Hanley, Staffordshire; Mr. E. JONES, engineer, Donnington Wood, Salop; and Mr. HENRY HEATH, solicitor, 12, Carlton Chambers, Regent-street, London, and Newport, Salop. 84

TO IRONMASTERS.—A RESPECTABLE YOUNG MAN, who has been for many years connected with an extensive ironworks, both in the works and at the shipping port, and well acquainted with the manufacture of iron and shipping business, wishes an APPOINTMENT as SHIPPING AGENT for a WORKS, or as PRINCIPAL or CORRESPONDING CLERK in a TOWN HOUSE, or in any other capacity connected with the iron trade that would suit him.—Address, "M. L.," *Mining Journal* office, 26, Fleet-street, London. 85

TO IRONMASTERS AND PROPRIETORS OF CHEMICAL WORKS.—An ENGLISH GENTLEMAN, who has held an appointment in extensive ironworks in Germany for a number of years, possessing a thorough knowledge of the German language and the iron trade, having established himself at Berlin, in order to transact business for English firms in the metal line, and articles manufactured from the same, OFFERS HIMSELF as AGENT FOR BERLIN and the NORTH OF GERMANY to ironmasters, parties engaged in the iron and metal trade, as also to proprietors of chemical works, in England and Scotland, for the purpose of attending to their interests and soliciting orders. A 15 years' experience, extensive and respectable business connections, with the highest references are offered.—Address, "X. Y., No. 191," Poste Restante, Berlin, Prussia. 86

TO IRONMASTERS.—WANTED, a SITUATION as ROLL TURNER, by a person well acquainted with the making of bars and rails of every description, having been engaged for many years in a large ironworks. Satisfactory references can be given.—Address, "A. Z.," care of Mr. H. Mullock, stationer, Newport, Monmouthshire. 87

TO CAPITALISTS.—WANTED, £1000—PARTNERSHIP OR OTHERWISE.—A GENTLEMAN, who has a LEASE of a very valuable BARYTES and LEAD ORE MINE in North Wales, near to railway and smelting works, and on which £1200 has been lately expended, is in WANT of a PARTNER with £1000, further to prosecute the works. There is now laid open and dry about 1500 tons (estimated) of barytes, with lead ore mixed through it, ready to get to surface. The annual return for this investment, from barytes alone, will give 50 to 60 per cent. profit. The sett is over a large extent of fine mineral ground, and presents an opportunity seldom met with.—Every information will be given to applications addressed "G. M.," *Mining Journal* office, 26, Fleet-street, London. 88

TO PERSONS DESIROUS OF CO-OPERATING ON THE AUSTRALIAN GOLD FIELDS, PERSONALLY OR BY DEPUTY.—An intelligent OPERATIVE, going early next month to Australia, to WORK his OWN QUARTZ REEFS PERSONALLY, with his own patent machinery, will GIVE ONE-TENTH of his EARNINGS for the ADVANCE of £350, to aid his defective resources. His intended scale of working will be 30 tons weekly, yielding from 450 to 600 ozs.; value from £1800 to £1200.—Letters, pre-paid, to "D. M. P.," 65, King William-street, City. Security of a valuable patent, and excellent references. 89

WANTED, for an Australian Colony, a DRAUGHTSMAN, practically acquainted with the details of building ironworks. Salary £500 to a qualified person.—Address, in the first instance, stating age, nature and length of employ, and experience generally, without testimonials, "G. H. F.," 5, Lordship-lane, Tottenham, London. 90

WANTED, a SITUATION, as MANAGER of IRON WORKS, by a party who has had considerable experience in very large forges, in making shafts, &c., up to 20 tons; or he would take a ROLL TURNER'S SITUATION, having worked for some time in that department. Undeniable references can be given.—Address, "M. D.," *Mining Journal* office, 26, Fleet-street, London. 91

MINE MACHINERY FOR SALE BY PRIVATE CONTRACT.—An excellent 70 in. cylinder PUMPING ENGINE, 12 ft. stroke in the cylinder, and 10½ ft. in the shaft, with two boilers 26 tons; new three years ago.

An excellent 24 in. cylinder DOUBLE-ACTING STAMPING ENGINE, 9 ft. stroke, with one boiler about 10 tons, and 36 heads of stamps, with iron axles and lifters, complete; new within two years.

A nearly new DRAWING MACHINE, complete.

A 46 ft. WATER-WHEEL, 3 ft. breast (within), with cast-iron axle and sockets, two sweep rods, and balance-bob, complete.

45 fms. 20 in. PLUNGER-LIFT, complete. J. J. GUMMOE.

St. Austell, Aug. 13, 1856. 92

TO BE DISPOSED OF, a FIRST-RATE LEAD and COPPER SETT.—Apply to Capt. WM. VERRAN, Llanidloes, N. W. 93

FOR SALE.—A VALUABLE UNOPENED COAL FIELD, A COLLIERY in full operation.

WANTED.—A PARTNER in a COLLIERY, to advance £1500 capital.

(All the above are in the Forest of Dean.)

TO BE LET.—An EXTENSIVE COAL FIELD and a SMALL COLLIERY in Carmarthenshire.

For particulars, apply to Mr. JOSHUA RICHARDSON, C.E., Neath, South Wales. 94

ON SALE.—ONE 5, ONE 10, ONE 15, and ONE 20-horse HIGH-PRESSURE ENGINES, quite new and complete.

ONE 4-horse PORTABLE ENGINE and BOILER, nearly new, mounted on wheels.

TWO 25-horse COUPLED CONDENSING BEAM ENGINES and TWO BOILERS, complete.

ONE 30-horse CONDENSING ENGINE, as good as new.—Apply to W. J. HOYLE, consulting engineer and machinery agent, 28, Pall Mall, Manchester. 95

HIGH-PRESSURE STEAM-ENGINES, HORIZONTAL or VERTICAL, 5, 8, 10, 14, to 25 horse power, at £8 to £9 per horse power, delivered in London. Can be fitted up in any part of the country.—Drawings and prices to be had on application to W. T. HENDRY and Co., engineers, &c., No. 38, Upper Thames-street, London. 96

STEAM PUMPING ENGINE FOR SALE, on Sims's Patent. Combined principle, 22 in. and 40 in. cylinders, 8 ft. stroke, equal beam, with 8 tons boiler, &c., in good condition, lying near Hayle, Cornwall.—For further particulars, apply to Mr. THOMAS FIELD, 2, Crown-court, Threadneedle-street, London. 97

FOR IMMEDIATE SALE, BY PRIVATE CONTRACT, a valuable COAL FIELD in the FOREST OF DEAN, of about 356 acres; abutting on the Forest of Dean Central Railway, and containing FOUR WORKABLE VEINS OF COAL of superior quality, of the aggregate thickness of 11 ft. 6 in.—For detailed information, apply to Mr. JOSHUA RICHARDSON, C.E., Neath, South Wales; or to Mr. J. F. CORBETT, solicitor, Worcester. 98

GREAT CRINNIS MINING COMPANY.—Notice is hereby given, that a CALL of ONE SHILLING per share on the NEW SHARES of this company has been made, payable on Tuesday, the 30th September inst., at the offices of the company, 47, Old Broad-street, London.

By order of the Commmittee, R. C. MANUEL, Sec.

47, Old Broad-street, London, Sept. 18, 1856. 99

MEXICAN AND SOUTH AMERICAN COMPANY.—The OFFICES are REMOVED from 17, Gracechurch-street, to 15, ANGEL COURT, THROGMORTON STREET. 100

LINARES LEAD MINING COMPANY.—Notice is hereby given, that, in conformity with the Deed of Settlement, the HALF-YEARLY GENERAL MEETING of the shareholders in this company will be HELD at the London Tavern, Bishopsgate-street, on Monday, the 29th inst., at One o'clock P.M., to receive the accounts, balance-sheet, and reports of the directors and auditors, and for the general purposes, as authorised by the Deed of Settlement.

By order of the Board, J. B. COLOGAN, Sec.

5, Queen-street-place, Upper Thames-street, London, Sept. 12, 1856. 101

LINARES LEAD MINING COMPANY.—Notice is hereby given, that a SPECIAL GENERAL MEETING of the shareholders in this company will be HELD at the London Tavern on Monday, the 29th inst., immediately after the Half-Yearly General Meeting, called for One o'clock P.M. on that day, for the purpose of considering and deciding whether, in registering this company under the Joint-Stock Companies Act, 1856, it shall be registered with limited liability or not.

By order of the Board, J. B. COLOGAN, Sec.

5, Queen-street-place, Upper Thames-street, London, Sept. 18, 1856. 102

LINARES LEAD MINING COMPANY.—Notice is hereby given, that, at a Meeting of the Directors, held this day, it was resolved—

That a dividend of 5s. per share be declared on the paid-up shares of the company, payable on Saturday, the 25th day of October next; and that the transfer books be closed for such dividend on the 17th, and re-opened on the 27th day of October.

By order of the Board, J. B. COLOGAN, Sec.

5, Queen-street-place, Upper Thames-street, London, Sept. 18, 1856. 103

LUSITANIAN MINING COMPANY.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders in the Lusitanian Mining Company will be HELD at the offices of the company, 5, Queen-street-place, Upper Thames-street, London, on Wednesday, the 1st day of October, to consider and determine whether the company shall be registered under the Joint-Stock Companies Act, 1856, as a company with limited liability.

By order of the Board, W. A. HART, Sec.

5, Queen-street-place, Upper Thames-street, London, Sept 17, 1856. 104

ROYAL SANTIAGO MINING COMPANY.—The Directors hereby give notice, that they have made a CALL upon the shareholders of ONE POUND per share, to be paid to Messrs. Glyn and Co., the company's bankers, on or before the 3d November next. The certificates must be left at the office of the company, and a form will then be given to pay the call.

38, Broad-street-buildings, Sept. 3, 1856. 105

WILDBERG GREAT CONSOLIDATED MINING COMPANY. —At an Extraordinary General Meeting of the shareholders of this company, held at Cologne on the 6th inst., the Council of Administration were authorised to issue preferential shares and debentures, on the conditions stated in the circular to the shareholders, dated 30th August last.

The Council, therefore, hereby give notice, that they will RECEIVE APPLICATIONS from shareholders for such PREFERENTIAL SHARES and DEBENTURES until the 25th inst.; and that in the meantime copies of the circular may be obtained by personal application at, or letter addressed to, the offices of the company, 1, Charlotte-row, Mansion House, London.

By order of the Council of Administration,

Dated this 9th September, 1856. F. C. W. BRANDT, Sec. 106

ANGLO-CALIFORNIAN GOLD MINING COMPANY.— DISSATISFIED SHAREHOLDERS are requested to COMMUNICATE with me, previously to a general meeting, to be called in about a fortnight, so as to prevent the property and effects of this company passing to the directors, unless by public competition.—Milton next Gravesend, Sept. 17, 1856. W. A. COOMBE. 107

CAN ANY ONE SUPPLY, and at what price, a COMPLETE COPY of Mr. TREDINNICK'S CIRCULAR UPON MINING MATTERS!—Applications to be made to "M. M.," *Mining Journal* office, 26, Fleet-st., London. 108

OVERLAND ROUTE.—STEAM TO INDIA AND CHINA, &c., VIA EGYPT.—The PENINSULAR AND ORIENTAL STEAM NAVIGATION COMPANY BOOK PASSENGERS and RECEIVE GOODS and PARCELS for the MEDITERRANEAN, EGYPT, ADEN, BOMBAY, CEYLON, MADRAS, and CALCUTTA, by their mail packets leaving Southampton on the 4th and 20th of every month; and for CHINA and the STRAITS, by those of the 4th of the month.
For further particulars, apply at the company's offices, No. 122, Leadenhall-street, London; and Oriental-place, Southampton. 109

STEAM COMMUNICATION TO AND FROM ABERYSTWITH AND LIVERPOOL, CALLING AT PORTMADOC; AND ABERYSTWITH AND BRISTOL, CALLING AT LLANELLY.
The CAMBRIAN STEAM PACKET COMPANY (LIMITED), until the completion of the new iron screw steamer, the "Plynlymon," now building for them, and unless prevented by any unforeseen occurrence, intend DISPATCHING, with goods and passengers, the powerful SCREW STEAMER "REGALIA," 200 tons burthen, or some other vessel suitable for the trade, on the days and hours hereunder mentioned:

Monday	Sept. 1,	leave	Liverpool	for	Aberystwith,	at 12.30	after.*
Tuesday	2,		Portmadoc		Aberystwith	9.	after.
Wednesday	3,		Aberystwith		Bristol	9.	after.†
Thursday	4,		Llanelly		Bristol	9.	even.
Saturday	6,		Bristol		Aberystwith	8.30	morn.†
Sunday	7,		Llanelly		Aberystwith	10.30	even.
Tuesday	9,		Aberystwith		Liverpool	7.	morn.‡
Friday	12,		Liverpool		Aberystwith	10.	even.‡
Monday	15,		Aberystwith		Liverpool	6.30	even.*
Tuesday	16,		Portmadoc		Liverpool	8.30	even.
Friday	19,		Liverpool		Aberystwith	2.30	after.*
Saturday	20,		Portmadoc		Aberystwith	11.	even.
Monday	22,		Aberystwith		Bristol	12. 4	after.†
Wednesday	24,		Llanelly		Bristol	1.30	morn.
Thursday	25,		Bristol		Aberystwith	2.	after.†
Friday	26,		Llanelly		Aberystwith	5.	after.
Monday	29,		Aberystwith		Liverpool	5.	morn.*
Tuesday	30,		Portmadoc		Liverpool	7.	even.

* Calling at Portmadoc. † Calling at Llanelly. ‡ Calling at Caernarvon.
FREIGHTS MODERATE.
N.B. Passengers are requested to take charge of their own luggage, as the company will not be responsible in any way for its safety. Horses, cattle, and vehicles of all kinds, are shipped on deck at the owner's risk. The company will not be answerable for any packages above the value of £10, unless the value thereof be previously declared, and paid for accordingly; nor for any loss of time, or accident occasioned by their steamer being engaged in the towing or salvage of any other vessel, nor for hazardous goods, unless so declared at time of shipping.
For freights and further particulars, apply to the secretary, at the company's head offices, Parthenon Chambers, 14, Regent-street, London; or to the agents, E. T. TURNER, 12, Quay-street, Bristol; MCCLUNE AND TAMPLIN, Columbia-buildings, Brunswick-street, Liverpool; GEORGE GREEN, Cambrian Foundry, Aberystwith; DAVID EVAN, Llanelly; BENNETT WILLIAMS, Harbour Office, Portmadoc; and F. E. TUCKER, 4, Water-lane, Tower-street, London.

IMPORTANT TO RAILWAY COMPANIES, ENGINEERS, CONTRACTORS, MANUFACTURERS, AGENTS, SHIPPERS OF MACHINERY, AND OTHERS.—Messrs. DUNN, HATTERSLEY, and CO., of the WINDSOR BRIDGE IRONWORKS, PENDLETON, NEAR MANCHESTER, have now arranged their works for the MANUFACTURE, on a very extensive scale, of Engines, Boilers, Bridges, Turn Tables, Cranes, Pumps, Water Tanks, Switches and Crossings, Tools, and Plant; every description of Machinery for Railways, and Steam Boilers, warranted against explosion; all on the most improved principles, and modern construction. 111
NOTE.—The only makers and patentees of the low-shelved traverser; all others are piracies of the original patent.

STATIONARY STEAM-ENGINES OF THE BEST QUALITY, from 1 to 50-horse power, fitted with VARIABLE EXPANSION GEAR. These engines, which have been designed to combine great simplicity of parts with the utmost economy of action, are supplied with or without boilers, at the lowest possible rates; and erected, if required, in any part of the kingdom. General boiler and tank work carefully executed upon advantageous terms.—Apply to Messrs. WILLIAM TORRANCE and Co., engineers, Barnstaple. 112

CHEMICAL LABORATORY, No 1, TORRINGTON STREET, RUSSELL SQUARE, for the STUDY of GENERAL or APPLIED CHEMISTRY, ANALYSIS, or ASSAYING, under the direction of Mr. B. H. PAUL, Ph.D., F.C.S. (late Principal Assistant in Mr. Graham's Chemical and Assay Laboratories, at University College).
The laboratory is open daily from Nine till Five. Fee, including use of apparatus, chemicals, &c.—One month, £5 5s.; three months, £12 12s.; six months, £20. 113
EVENING COURSE of ANALYTICAL CHEMISTRY, from Six till Nine daily, except Saturdays, to commence on the 1st October. Fee, including use of apparatus, &c.—One month, £2 2s.; three months, £5 5s.

CHEMICAL ANALYSIS, ASSAYING, &c.—Mr. PAUL (late Principal Assistant in Mr. Graham's Chemical and Assay Laboratories at University College) OFFERS HIS SERVICES in the ANALYSIS OF MINERALS, SOILS, MANURES, WATER, &c., the ASSAY of ORES or METALS, the VALUATION of RAW or MANUFACTURED MATERIALS employed in the Arts, Pharmacy, &c., and in cases where the aid of chemical experiment or information may be required.
Chemical Laboratory, 1, Torrington-street, Russell-square. 114

ASSAY OFFICE AND LABORATORIES. DUNNING'S ALLEY, BISHOPSGATE STREET WITHOUT, LONDON. Conducted by JOHN MITCHELL, F.C.S., Author of "Manual of Practical Assaying," Metallurgical Papers, &c.
Assays and Analyses of every description performed as usual. Special Instruction in Assaying and Analysis. Consultations in every branch of Metallurgical and Manufacturing Chemistry. Assistance rendered to intending Patentees, &c.
For amount of fees, apply to the office, as above. 115

HENRY J. MORTON AND CO.'S (No. 2, BASINGHALL BUILDINGS, LEEDS) PATENT WIRE ROPES, for the use of MINES, COLLIERIES, RAILWAYS, &c.; one-half the weight of hemp rope, and one-third the cost; one-third the weight of chains, and one-half the cost—in all deep mines these advantages are self-evident. References to most of the principal colliery owners in the kingdom.
GALVANISED SIGNAL CORDS AND KNOCKER LINES; will not rust or corrode, and not affected by the copper water in mines. Very strong, and not at all liable to break. Prices from 15s. per 100 yards.
PATENT ASPHALTED ROOFING FELTS, 1d. per foot.
DRY HAIR BOILER FELTS, to SAVE COAL.
PATENT BOILER COMPOUND, for bad water.
FAIRBANK'S WEIGHING MACHINES, of all sizes.
GALVANISED IRON ROOFING AND SPOUTING.
MILNER'S FIRE-PROOF SAFES. 116
STOCK of MINING and RAILWAY STORES in Liverpool and London:—viz., OILS, GREASES, COTTON WASTE, SPUN YARN, WHITE LEAD, VARNISHES, &c.; and at very low prices.—Address, 2, Basinghall-buildings, Leeds.
SOLE AGENTS for Prof. GLUKMAN'S ELECTRIC SIGNAL from RAILWAY GUARD to ENGINE DRIVER, and also for the use of COLLIERIES and MINES.
N.B. Illustrated price list on application.

MOST IMPORTANT TO COLLIERY OWNERS AND COLLIERY MANAGERS.—HENRY J. MORTON AND CO., GALVANISED IRONWORKS, No. 2, BASINGHALL BUILDINGS, LEEDS, beg to call attention to their IMPROVED SIGNAL BELL, especially prepared to meet the requirements of the new Act for the Inspection of Coal Mines. It has met with the decided approval of many large colliery owners and managers. SIMPLE, EFFICIENT, and CHEAP. Price £1 10s. each.
BYRAM'S PATENT ANEMOMETER, for testing the ventilation.
Price £3 3s. to £4 4s. each.
STEAM PRESSURE GAUGES, very strong and accurate, £2 each. 117
For further information, apply to
H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

FAIRBANK'S IMPROVED PATENT WEIGHING MACHINES, for the use of IRONWORKS, COLLIERIES, RAILWAYS, WAREHOUSES, STORES, &c. The most ACCURATE MACHINES in use, and the cheapest.
MACHINES of all sizes, from 1 cwt. to 30 tons, for RAILWAY WAGONS, CARTS, or WAGONS.—For prices and all other information, apply to HENRY J. MORTON and Co., Galvanised Ironworks, 2, Basinghall-buildings, Leeds.
Asphalted Roofing Felts, Boiler Felts, Galvanised Iron, &c., in Stock. 118

CHEAP, LIGHT, AND DURABLE ROOFING, ONE PENNY PER FOOT.—HENRY J. MORTON AND CO., 2, BASINGHALL BUILDINGS, LEEDS. PATENT ASPHALTED ROOFING FELTS, for roofing sheds, contractors' cottages, ore-dressing sheds, brick and tile sheds, and all agricultural purposes. One penny per square foot. The cheapest roofing manufactured. Stocks kept in London, Leeds, and Bristol. DRY HAIR BOILER FELTS, for saving fuel. 119
H. J. MORTON AND CO., 2, Basinghall-buildings, Leeds.

PECUNIARY DIFFICULTIES AND MONETARY ACCOMMODATION.—Mr. THOMAS begs respectfully to inform his friends and the public that he continues to ARRANGE the AFFAIRS of those SEEKING RELIEF from EMBARRASSMENT, through whatever means the circumstances of the case may suggest; to COLLECT DEBTS and RENTS; and to transact any other business that may be required. From his having been connected with commercial and monetary matters for upwards of 30 years, his knowledge amongst capitalists of all grades enables him to NEGOCIATE LOANS upon every kind of good security, personal or otherwise. Parties waited upon by appointment.
Address, 3, Witchampton-street, New North-road, Hoxton. 120

MESSRS. FULLER AND CO., 51, THREADNEEDLE STREET, LONDON, continue to TRANSACT BUSINESS in all DIVIDEND MINES, many of which are paying 20 per cent.; also, in those of a PROGRESSIVE character, such as hold out a promise of enhancing in value, and of becoming permanently safe investments, at the same time limiting this class of property from liability.
BUSINESS TRANSACTED in BANKING, INSURANCE, RAILWAY, and other SECURITIES, at the closest price of the day.
WANTED, at present quotations.—Alfred Consols, Bedford United, Botallack, Condurrow, Devon Great Consols, Gonamena, Hingston Down, Rosewarne, South Wheal Frances, Sortridge Consols, West Caradon, Wheal Arthur, Buller. Also, in the following Progressive Mines—Ballyvirgin, Calstock Consols, Exmouth Consols, Craddock Moor, Gawton United, Great Wheal Baddern, Lady Bertha, Swanpool, Wh Edward, Ladcott, Trefusis, Great Wheal Alfred, Great Hewas, North Wh. Robert. 121

UNITED STATES OF AMERICA.—DUPEE, PERKINS, and SAYLES, BOSTON, MASSACHUSETTS, BROKERS for the PURCHASE and SALE of STATE, CITY, and RAILROAD SECURITIES, MANUFACTURING and BANK SHARES, give particular attention to the MINING COMPANIES OF LAKE SUPERIOR, and furnish reliable information concerning them. 122
[DUPEE, PERKINS, and SAYLES refer to the Editor of the *Mining Journal*.]

RAILWAY WAGONS.—WILLIAM A. ADAMS AND CO., MIDLAND WORKS, BIRMINGHAM.
BROAD AND NARROW GUAGE COAL AND IRONSTONE WAGONS, *IN STOCK—FOR SALE OR HIRE.* 123

THE RAILWAY CARRIAGE COMPANY, OLDBURY, NEAR BIRMINGHAM.
MANUFACTURERS OF EVERY DESCRIPTION OF RAILWAY PLANT AND IRONWORK.
NEW AND SECOND-HAND RAILWAY WAGONS ALWAYS IN STOCK, FOR SALE OR HIRE. 124

RAILWAY WHEEL AND AXLE WORKS.—GEORGE WORSDELL AND CO., WARRINGTON, MANUFACTURERS of EVERY DESCRIPTION of HAMMERED IRON, TYRES, AXLES, &c. 125

WARRINGTON FORGE AND BAR IRON WORKS, WARRINGTON.
GEORGE WORSDELL AND CO., MANUFACTURERS OF EVERY DESCRIPTION OF MERCHANT BARS. 126

BURGIN AND WELLS, STEEL CONVERTERS AND REFINERS, MANUFACTURERS of RAILWAY CARRIAGE and WAGON SPRINGS, IMPROVED CAST-STEEL FILES, &c.
HOLLIS CROFT STEEL WORKS, SHEFFIELD. 127

JOHN BRYAN, GENERAL COMMISSION AGENT 1, SANDHILL, NEWCASTLE-ON-TYNE.
CONTRACTS made for all kinds of MACHINERY, CAST and WROUGHT-IRON, RAILWAY BARS, ANCHORS, CHAINS, COALS, COKE, FIRE-BRICKS, &c.
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TO IRONMASTERS, MERCHANTS, CONTRACTORS, FOUNDERS, &c.—Messrs. DAUNT and MOFFAT, METAL BROKERS, 59, ST. VINCENT STREET, GLASGOW, OFFER THEIR SERVICES for the PURCHASE and SALE of PIG and MANUFACTURED IRON.
All orders carefully executed, and prompt shipments made. 129

THE PERMANENT WAY COMPANY.—Among other recent important inventions, the company beg to call particular attention to PRINCE'S PATENTS for CASTING RAILWAY CHAIRS; POLE'S PATENT IMPROVED FISH JOINT; PATENT HOLLOW SPLIT SPIKES; and Dr. BOUCHERIE'S IMPROVED PROCESS FOR PRESERVING SLEEPERS, FENCING, TELEGRAPH POSTS, &c., FROM DECAY. Every information may be had upon application to CHARLES MAY, F.R.S., the manager, or to 130
26, Great George-street, Westminster. WILLIAM HOWDEN, Sec.

COALS FOR GAS AND COKE, of very superior quality, yielding 10,000 ft. of gas per ton, and producing COKE peculiarly adapted for locomotives, foundries, and smiths, MAY BE HAD in any quantity, direct from the collieries, by applying to THE BRITHDIR COLLIERY AND COKE CO., Newport, Monmouthshire. 131

MESSRS. R. & J. COUPE, ENGINEERS and IRONFOUNDERS, MANUFACTURERS of HORIZONTAL HIGH-PRESSURE STEAM-ENGINES, from 10 to 200-horse power; the larger description of engines mounted with their IMPROVED EQUILIBRIUM SLIDE PISTON VALVE, which has proved itself so eminently adapted for winding and other engines.
Also, MANUFACTURERS of their IMPROVED BLAST ENGINES, PUMPING ENGINES, &c. (Vide Editor's Notice in the *Mining Journal*, Aug. 30, 1856, p. 593, under the head of Improvements in Donkey Engines.)
Clayton Foundry, Wigan. 132

GOLD AND SILVER AMALGAMATING MACHINE.—Messrs. SYMONDS, FELL, and CO.'S PATENT AMALGAMATOR MAY BE SEEN in DAILY OPERATION, effectually extracting gold and silver from the ore. They are prepared to PURCHASE any quantity of GOLD QUARTZ, or AURIFEROUS EARTHS; or UNDERTAKE the REDUCTION of ORES; or SUPPLY their NEW PATENT MACHINERY.
Mill Wall General Crushing and Grinding Mills, Smelting and Assay Works, Mill Wall, Poplar. 133

SAFETY BLASTING CARTRIDGES.—JOHN WESTLAKE, HELSTON, CORNWALL, MANUFACTURER of superior WATERPROOF BLASTING CARTRIDGES, and CARTRIDGE CASES, for blasting operations in wet ground, which for CHEAPNESS, EFFICIENCY, and SAFETY, are unequalled.
The following is taken from a large number of testimonials from practical and experienced agents:—
"*Trumpet Consols Mines, July* 12, 1856.—SIR: We have examined and tried your Gutta Percha and India Rubber Cartridges, and beg to express our approbation of them for blasting in general; and we doubt not that if you render them at a reasonable price you will have an extensive demand for them; they only require a trial to determine their superiority, as they are the best that have been yet made for miners' use.—RICHARD KENDALL; RICHARD QUENTRALL." 134

PATENT SAFETY FUSE.—The GREAT EXHIBITION PRIZE MEDAL was AWARDED to the MANUFACTURERS of the ORIGINAL SAFETY FUSE, BICKFORD, SMITH, DAVEY, and PRYOR, who beg to inform Merchants, Mine Agents, Railway Contractors, and all persons engaged in Blasting Operations, that, for the purpose of protecting the public in the use of a genuine article, the PATENT SAFETY FUSE *has now a thread wrought into its centre*, which, being patent right, infallibly *distinguishes it from all imitations*, and ensures the continuity of the gunpowder. 135
This Fuse is protected by a Second Patent, is manufactured by greatly improved machinery, and may be had of any length and size, and adapted to every climate.
Address,—BICKFORD, SMITH, DAVEY, and PRYOR, Tuckingmill, Cornwall.

SAFETY FUSE.—Messrs. WILLIAM BRUNTON and CO., PENHALLICK, near REDRUTH, CORNWALL, MANUFACTURERS OF FUSE, of every size and length, as exhibited in the Great Exhibition of 1851, and supplied to the Royal Arsenal at Woolwich, the Arctic Expedition, and every part of the globe.
Messrs. BRUNTON & CO. are at all times PREPARED to EXECUTE UNLIMITED ORDERS for SUPPLYING FUSE direct from their own MANUFACTORY, upon warrant that it will prove equal to, if not better, than any to be procured elsewhere. 136

TO COAL PROPRIETORS.—GEORGE FORSTER'S PATENT TRAP DOORS are NOW AT WORK in some of the pits near Wigan. Their construction is simple; one door is always shut, so that a regular steady current of air is kept in the workings. The doors cannot be left open by carelessness, therefore no pits producing gas should be without them.—Testimonials and model may be seen by application to G. FORSTER (late Standish Colliery), New Town, near Wigan. 137

TO RAILWAY CONTRACTORS, MINERS, &c.—The UNDERSIGNED RECEIVE ORDERS for AMERICAN MADE CAST-STEEL PICKS, SPADES, SHOVELS, COLLINS' AXES, &c., which will be delivered in England, India, Australia, &c., at the American manufacturers' prices, on payment of a small commission. 138
The above cast-steel tools are much lighter, more durable, and cheaper, than any yet offered, and enable the workmen to do a much better day's work.—Samples can always be seen at Sheaf Works, Sheffield. Apply to EYRE, WARD, AND CO.

TO ENGINEERS, MACHINE MAKERS, AND OTHERS.—CHAS. MACINTOSH and CO., PATENTEES and MANUFACTURERS of the VULCANISED INDIA-RUBBER, in all degrees of elasticity, recommend this material as capable of SUSTAINING the ACTION of HOT or COLD WATER, GAS, STEAM, ACIDS, and GREASE. It is used extensively for valves in marine and land engines, railway buffers and springs, washers for pipe joints, hose, and tubing, also for gas holders, acid pumps, alkali cisterns, &c. Articles, moulded or otherwise, made to any size or figure.—Address, 3, Cannon-street West, London; and Cambridge-street, Manchester. 139

IMPORTANT TO ENGINEERS, MILL OWNERS, AND ALL PARTIES USING MACHINERY.—AMERICAN INDIA RUBBER DRIVING BANDS or MACHINE BELTING, PACKING, SHEET, VALVES, WASHERS, and HOSE, at wholesale prices, from the importers, W. T. HENDRY and Co., 38, Upper Thames-street, London.
PATENT FLEXIBLE STEAM PACKING, in rope or sheet, at 1s. 3d. per lb. 140

VULCANISED INDIA RUBBER MACHINE BANDING, does NOT STRETCH or SLIP on the pulleys, will last longer than leather at less cost, and will do more work than any other material. HOSE for BREWERIES, &c., warranted NOT TO IMPART the SLIGHTEST TASTE to any liquor passing through it, and to resist the effects of acid, grease, or any heat below 300°. Also, HOSE for LOCOMOTIVES, GARDENING, AGRICULTURAL, and other purposes. WASHERS for HOT or COLD WATER, or STEAM. The above articles kept in stock, others made to order. VALVES, RINGS, &c., cut from sheet at a minute's notice. Price lists on application.—DODGE, BACON, and Co., 44, St. Paul's Churchyard, London. 141

PUMPING MACHINERY.—LIFTING and FORCING PUMPS, PATENT CENTRIFUGAL and DOUBLE-ACTING PUMPS, DEEP WELL PUMPS, STEAM-ENGINES (portable and fixed), HYDRAULIC RAMS, WATER-WHEELS, and every description of MACHINERY, of the most approved construction, MANUFACTURED and SUPPLIED by GWYNNE and CO., Hydraulic and Mechanical Engineers, Essex Wharf, Strand, London. Catalogues on application. 142

MINING.—PORTABLE PUMPING AND WINDING ENGINES.—TO BE LET ON HIRE, or FOR SALE, several NEW and SECOND-HAND ENGINES, suitable for pumping, winding, or any other work, from 10-horse to 25-horse power.—Apply to Messrs. MEDWIN and HALL, engineers, Surrey Ironworks, Blackfriars-road, where they may be seen. 143

NEW PATENT ACT, 1852.—Mr. CAMPIN, having advocated Patent Law Reform before the Government and Legislature, and in the pages of the *Mining Journal*, &c., is now READY to ADVISE and ASSIST INVENTORS in OBTAINING PATENTS, &c., under the NEW ACT. 144
The Circular of Information, gratis, on application to the Patent Office and Designs' Registry, 156, Strand.

NOTICE TO INVENTORS AND PATENTEES.—The OFFICES for PROCURING PATENTS are REMOVED to No. 32, ESSEX STREET, STRAND, LONDON, where all information (British and foreign) may be obtained gratis.—AVERY and Co., patent agents and negociators. 145

NOTICE TO RAILWAY AND STEAM-BOAT TRAVELLERS.—ANDERTON'S HOTEL, 162, 164, and 165, FLEET STREET. BREAKFAST, with joint, 1s. 6d. BEDS, 10s. 6d. per week. DINNERS from Twelve to Eight o'clock; joint and vegetable, 1s. 6d.; with soup or fish, 2s. TURTLE SOUP and VENISON DAILY. TABLE D'HOTE at Half-past One and Half-past Five, at Two shillings each. A night porter in attendance. 146

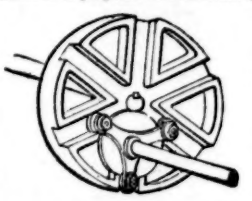
PATENT FURNACES AND STEAM BOILERS.—LEE STEVENS'S FURNACES PREVENT SMOKE, ECONOMISE FUEL, INCREASE STEAM, extend the flame through the flues, and are easily and safely adapted to any evaporative or heating purpose. Official reports, working drawings, accumulating hundreds of references, and other practical information, at No. 1, Fish-street-hill, City, where particulars are also given of LEE STEVENS'S PATENT SAFETY STEAM BOILERS, marine and land. 147

SELF-ACTING SAFETY ALARM FOR BOILERS.—TO COLLIERY OWNERS AND MANUFACTURERS.—JOHNSTON'S simple PATENT ALARM has now been PROVED to be CERTAIN and EFFECTUAL IN ACTION. Any disarrangement of the water supply to the boiler, or neglect on the part of the attendants, is immediately made known in the vicinity, and previous to any immediate danger. Price 50s.—Further particulars, with a drawing, may be had upon application to Mr. WATSON, High Bridge Works, Newcastle-on-Tyne, sole manufacturer, who can furnish the highest testimonials of their efficiency.
Also, always on hand, WATER and PRESSURE GAUGES, of the most approved kind; as well as the MINERS' SAFETY LAMPS, of the best description. 148

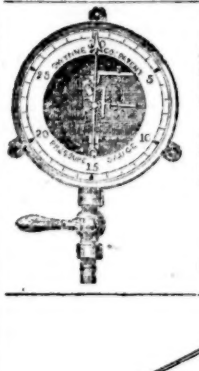
GARDNER'S PATENT STEAM GENERATOR AND SMOKE CONSUMER produces MORE STEAM, with LESSENED CONSUMPTION OF FUEL, and ENTIRE REMOVAL OF SMOKE. These patented inventions are highly recommended for their simplicity, durability, and great economy. They are self-acting, and have no moving parts, therefore require no external aid. They are applicable to all furnaces, locomotives, marine engines, ovens, pottery and other kilns, common fires, kitchen ranges, hall and hatters' stoves.
Applications to be made to the patentee, 24, Norfolk-street, Middlesex Hospital; to Messrs. BURMOOR and HEALY, 118, Dorset-street, Fleet-street; or to Z. D. BERRY, Albion Works, Wilton-road, Pimlico.
Testimonials, &c., may be seen upon application. 149

TO MARINE ENGINEERS, SCREW SHIP COMPANIES, AND MACHINISTS GENERALLY.

THE NEW PATENT MULTIPLE ROTATIVE GEARING.—This justly admired invention contrasts with the ordinary toothed gearing, for which it is proposed as a substitute, and possesses the pre-eminent advantages of COMPACTNESS, STRENGTH, DURABILITY, FREEDOM FROM NOISE and BACKLASH, UNIFORMITY and SMOOTHNESS of ACTION, REDUCED FRICTION, FACILITY for LUBRICATION and REPAIR, and virtually WITHOUT RISK of ACCIDENT, advantages unequalled in any other arrangement of gearing. It is proposed for all purposes where a change of speed is required, and is peculiarly applicable for screw propulsion.



The proprietors of the patent are prepared to GRANT DISTRICT and OTHER LICENSES for the manufacture of this gearing, or to ENTER INTO CONTRACTS for the adaptation of the invention to screw steam-vessels, or other machinery, upon application to their agent, No. 3, Hanover Chambers, Buckingham-street, Adelphi, where any further particulars may be obtained, and models and testimonials inspected.
The invention was honourably mentioned by the International Jury at the French Exhibition of 1855; and has been favourably noticed in the *Artizan* of June and July, 1855, and the *Mining Journal* of 8th December, 1855. Manufacturers treated with on the most liberal terms. Communications by letter post paid. 150



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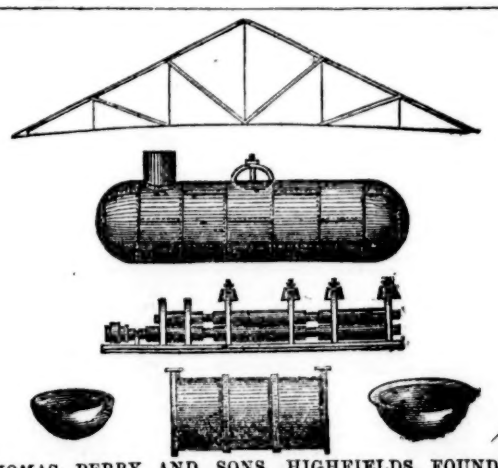
PRICES.—Divisions on enamel dials indicating to 12 20, 30, 60, or 80 lbs. pressure on the square inch, 55s. each; to 140 lbs. ditto, 60s. each; to 200 and 300 lbs. ditto, 65s. each. Vacuum Gauges, 55s. each. Any other divisions on dial can be made to order.
EVERY INSTRUMENT WARRANTED. 151
Further particulars on application to GWYNNE and Co., engineers, Essex Wharf, Strand, London.



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PLANING and TURNING done to order. 152

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JOSEPH CRAWHALL AND SONS, ST. ANN'S HEMP AND WIRE ROPE WORKS, NEWCASTLE-ON-TYNE. 153

PATENT IMPROVED WIRE ROPE WORKS, MILLWALL, POPLAR.—A. J. HUTCHINGS, and CO., Sole Makers to the Lords of the Admiralty.—ROUND and FLAT ROPES, of every description, suitable for mining operations or other purposes, GALVANIZED or UNGALVANIZED, MANUFACTURED upon an IMPROVED PRINCIPLE, ensuring great pliability and durability. The superiority of these ropes over hempen ones, in point of strength, lightness, durability, and cost, is admitted by all who have tried them.
GUIDE ROPES, SIGNAL CORD, LIGHTNING CONDUCTORS, &c.
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NERVOUS DEBILITY; its Causes, Symptoms, and Cure. A complete Essay on Spermatorrhœa, and on a New, Safe, and Speedy Mode of Treatment, showing the serious consequences resulting from the dangerous remedies commonly employed in this disease. By SAML. LA MERT, M.D., 37, Bedford-square, London. This work, emanating from a qualified member of the medical profession of many years' experience, is addressed to those persons who suffer from the various diseases acquired in early life.
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HOLLOWAY'S OINTMENT AND PILLS EFFICACIOUS REMEDIES FOR BAD LEGS.—Mr. H. Jones, of the Blue Bell, Llanerchymedd, had a very bad leg, completely covered with wounds, to cure which he tried all available remedies for more than six months, but without success; at last a clergyman recommended him to try Holloway's Ointment and Pills. After using them for a short time the wounds began to heal, and in a few weeks his leg was perfectly cured; in gratitude for which, Mr. Jones will answer any inquiries about it.—Sold by all medicine vendors throughout the world, and at Prof. Holloway's establishments, 244, Strand, London, and 80, Maiden-lane, New York; by A. Stampa, Constantinople; A. Guidicy, Smyrna; and E. Muir, Malta. 157

THE MINING SHARE LIST.

Shares.	Mines.	Paid.	Last Price.	Present.	Dividends per Share.	Last Paid.
5120	Alfred Consols (copper), Phillack*.....2l.	11s. 10d.....	£14¼	13½ 16	..... £15 0 0 ... £0 6 0	—Aug. 4, 1856.
1624	Ballenwidden (tin), St. Just	11¼	4⅜	.....	..... 12 5 0 ... 0	5 0—Jan. 1, 1854.
4000	Bedford United (copper), Tavistock+ .....2l.	6s. 8d.....	7⅛	5⅛ 6	..... 8 10 6 ... 0	2 0—Aug. 28, 1856.
240	Boscean (tin), St. Just	20½	97½	.....	..... 9 6 0 ... 3	0 0—Sept. 3, 1856.
200	Botallack (tin, copper), St. Just*	91¼	160	150 155	..... 376 5 0 ... 5	0 0—Aug., 1856.
100	Brightside and Froegatt Grove, Derbyshire.	50	68	.....	..... 3 0 0 ... 3	0 0—Apr. 30, 1856.
100	Brynford Hall (lead), Flint+	20	120	120	..... 13 6 0 ... 5	0 0—July 31, 1856.
1000	Bryntail, Llanidloes, Montgomeryshire	7	4⅛	.....	..... 0 5 0 ... 0	5 0—July 1, 1856.
6000	Bwlch (silver-lead), Cardiganshire	3	4½	4 4⅛	..... 0 2 6 ... 0	2 6—July 30, 1856.
1000	Carn Brea (copper, tin), Illogan	15	80	.....	..... 231 10 0 ... 2	0 0—Dec. 15, 1835.
2048	Carnyorth (tin), St. Just	4½	7	6¼ 6⅜	..... 0 15 0 ... 0	3 0—June 16, 1856.
10000	Castle Slate Quarry, Dolwyddlan	1	1⅛	.....	..... 0 2 2 ... 0	4—Feb. 8, 1855.
200	Cefn Cwm Brwyno (lead), Cardiganshire ...	33	120	.....	..... 3 0 0 ... 3	0 0—Sept. 4, 1855.
256	Condurrow (copper, tin), Camborne	20	125	.....	..... 68 0 0 ... 2	0 0—July 1, 1856.
30000	Craven Moor (lead), Yorkshire	½	⅜	.....	..... 0 0 9 ... 0	0 9—Feb. 28, 1856.
128	Cwmystwith (lead), Cardiganshire+	60	150	.....	..... 70 0 0 ... 5	0 0—Aug. 28, 1856.
1024	Devon Great Consols (copper), Tavistock* ..	1	405	405 xd	..... 516 0 0 ... 10	0 0—Sept. 19, 1856.
672	Ding Dong (tin), Gulval+	32	38	38	..... 13 17 6 ... 2	10 0—Sept. 15, 1856.
179	Dolcoath (copper, tin), Camborne*	257¾	140	.....	..... 891 14 0 ... 4	10 0—June 9, 1856.
12300	Drake Walls (tin, copper), Calstock	1l. 19s.....	2⅛	1⅞ 2	..... 0 9 0 ... 0	2 6—July 29, 1856.
300	East Daren (lead), Cardiganshire+	32	87½	.....	..... 12 0 0 ... 2	0 0—July 10, 1856.
128	East Pool (tin, copper), Pool, Illogan*	24¼	245	.....	..... 260 0 0 ... 5	0 0—Aug. 25, 1856.
024	East Wheal Margaret (tin, copper)	5⅞	5⅛	.....	..... 0 5 0 ... 0	5 0—Jan. 11, 1854.
1400	Eyam Mining Company (lead), Derbyshire..	3⅜	26⅜	26 27	..... 8 3 4 ... 0	10 0—Aug. 7, 1856.
494	Fowey Consols (copper), Tywardreath	40	26	.....	..... 404 13 0 ... 3	0 0—Feb. 12, 1856.
2210	Foxdale, Isle of Man* .....7l.	10s. 6d.....	36⅛	.....	..... 50 7 3 ... 1	0 0—Sept. 4, 1856.
320	Ditto (New Shares of 25l. each)*	25	36⅛	.....	..... 11 4 0 ... 1	0 0—Sept. 4, 1856.
4448	General Mining Co. for Ireland (cop., lead).	3	1⅜	.....	..... 1 0 8 ... 0	3 3—June 5, 1852.
1024	Gonamena (copper), St. Cleer	13¾	26½	26 26	..... 0 7 6 ... 0	7 6—Dec. 21, 1852.
13750	Great Polgooth (tin), St. Austell	4¼	1	.....	..... 0 10 0 ... 0	4 0—Oct. 12, 1852.
6000	Great South Tolgus	2⅜	10	10 10½	..... 0 2 6 ... 0	2 6—June 27, 1855.
26666	Great Wheal Vor (tin, copper), Helston.....	5	3	.....	..... 0 5 0 ... 0	5 0—June 20, 1855.
119	Great Work (tin), Germoe	100	160	.....	..... 206 10 0 ... 10	0 0—Aug. 26, 1856.
1024	Herodsfoot (lead), near Liskeard	8⅛	2½	.....	..... 2 12 6 ... 0	7 6—Apr. 18, 1854.
6000	Hingston Down Consols (copper), Calstock..	3⅜	3	3	..... 2 13 6 ... 0	3 6—July 26, 1856.
2000	Holyford (copper), near Tipperary	11	9	.....	..... 3 17 6 ... 0	5 0—July 30, 1856.
76	Jamaica (lead), Mold, Flintshire .....3l.	13s. 6d.....	—	.....	..... 380 0 0 ... 5	0 0—Mar. 10, 1851.
20	Laxey Mining Company, Isle of Man	100	1000	.....	.....1320 0 0 ... 50	0 0—Jan. 3, 1856.
160	Levant (copper, tin), St. Just	2½	102½	100	.....1054 0 0 ... 2	0 0—Aug. 12, 1856.
400	Lisburne (lead), Cardiganshire, Wales	18¾	122½	.....	..... 223 15 0 ... 5	0 0—June 7, 1855.
6000	Marke Valley (copper), Caradon .....4l.	10s. 6d.....	3⅜	3⅛ 3½	..... 0 5 6 ... 0	3 0—Sept. 7, 1855.
5000	Mendip Hills (lead), Somerset	3⅜	2⅜	.....	..... 1 2 6 ... 0	5 0—May 21, 1856.
5000	Merllyn (lead), Flint	3	⅜	.....	..... 1 11 0 ... 0	2 6—June 22, 1853.
20000	Mining Co. of Ireland (copper, lead, coal) ...	7	14¼	14¼	..... 11 14 6 ... 0	7 0—July 3, 1856.
5000	Nantcos and Penrhiw	1⅞	1⅝	1⅛ 1⅜	..... 0 1 6 ... 0	1 6—Apr. 30, 1855.
7500	Nantile Vale (slate), Llanllyfin	1	1	.....	..... 0 3 9 ... 0	1 3—Nov. 29, 1851.
6400	Nether Hearth, Westmoreland	2s.	1¼	1 1⅛	..... 0 2 0 ... 0	1 0—May 21, 1856.
470	Newtonards Mining Company, Co. Down+..	50	53	.....	..... 47 0 0 ... 1	0 0—July 15, 1856.
200	North Pool (copper, tin), Pool	22½	70	.....	..... 324 0 0 ... 2	0 0—Dec. 26, 1854.
140	North Roskear (copper), Camborne.....	10	85	75 80	..... 249 10 0 ... 4	0 0—Sept. 26, 1853.
6000	North Wheal Basset (copper, tin), Illogan*.	nil.	38	37	..... 9 14 0 ... 0	12 6—Aug. 20, 1856.
6400	Par Consols (copper), St. Blazey	1⅛	19⅛	.....	..... 25 16 0 ... 1	0 0—July 1, 1856.
500	Peak United (lead), North Derbyshire	7⅜	9⅛	.....	..... 4 10 0 ... 0	10 0—Apr. 12, 1856.
200	Phoenix (copper, tin), Linkinghorne	30	475	.....	..... 184 10 0 ... 37	10 0—May 7, 1856.
1000	Polberro (tin), St. Agnes (Preferential)	15	—	.....	..... 13 3 10... 0	10 6—June 28, 1856.
562	Providence Mines (tin), Uny Lelant+ ...20l.	13s. 2d.....	61	.....	..... 48 4 6 ... 4	0 0—Aug. 20, 1856.
2500	Rhosmydol and Bacheiddon (lead).....	11¼	11½	11⅝	..... 0 7 0 ... 0	3 0—June 18, 1856.
512	Rosewarne United (copper, tin), Gwinear*..	12	65	60	..... 25 10 0 ... 2	0 0—Aug. 11, 1856.
12000	Sortridge Consols (cop.), Whitchurch, Devon	6s.	2⅜	2⅜ 2⅝	..... 0 5 0 ... 0	2 6—July 30, 1856.
256	South Caradon (copper), St. Cleer*	2½	290	.....	..... 420 0 0 ... 8	0 0—July 29, 1856.
128	South Crinnis (copper), St. Austell	19	375	.....	..... 69 0 0 ... 20	0 0—June 18, 1855.
9000	South Tamar (silver-lead), Beerferris+	1l. 6s. 6d.....	⅛	.....	..... 5 6 0 ... 0	5 0—Apr. 10, 1856.
256	South Tolgus (copper), Redruth, Cornwall...	16	150	150	..... 69 0 0 ... 4	0 0—May 27, 1853.
496	South Wheal Frances (cop.), Illogan* ...18l.	13s. 9d.....	365	360 370	..... 214 5 0 ... 8	0 0—Sept. 1, 1856.
1024	Spearne Consols (tin), St. Just, Cornwall ...	3	4½	.....	..... 8 8 6 ... 0	2 6—Dec. 10, 1853.
280	Spearne Moor (copper), St. Just+ .....23l.	7s. 8d.....	—	.....	..... 3 15 0 ... 0	15 0—Mar. 14, 1856.
1024	St. Aubyn and Grylls (cop., tin), Breage.3l.	17s. 8½d.....	3½	.....	..... 0 17 6 ... 0	7 6—April 1, 1852.
94	St. Ives Consols (tin), St. Ives	80	100	.....	..... 888 0 0 ... 8	0 0—Feb. 21, 1854.
9300	Tamar Consols (silver-lead), Beeralston	4½	1⅝	1	..... 4 13 6 ... 0	2 6—Feb. 7, 1856.
6000	Tincroft (copper, tin), near Pool, Illogan ...	9	4½	.....	..... 7 8 6 ... 0	5 0—May 28, 1856.
2048	Trehane (silver-lead), Menheniot	⅜	⅜	⅜	..... 8 11 3 ... 0	5 0—Dec. 29, 1855.
572	Trelyon Consols (tin), St. Ives	11½	6	.....	..... 1 15 0 ... 1	0 0—Feb. 21, 1854.
96	Tresavean (copper), Gwennap, Cornwall ...	32½	110	.....	.....4677 15 0 ... 5	0 0—June 4, 1855.
120	Trethellan (copper), Gwennap, Cornwall ...	10½	20	.....	..... 403 13 6 ... 2	10 0—Apr. 29, 1851.
4000	Tretoil (copper, tin), Bodmin	12s.	3⅛	.....	..... 0 5 0 ... 0	5 0—July 8, 1856.
4096	Trewetha (silver-lead), Menheniot, Cornwall	2	3⅜	3¼ 3⅜	..... 1 6 0 ... 0	3 0—Sept. 16, 1856.
100	Trumpet Consols (tin), near Helston	95	90	.....	..... 55 0 0 ... 5	0 0—Dec. 20, 1854.
400	United Mines (copper), Gwennap	40	145	140 150	..... 61 5 0 ... 2	0 0—Feb. 12, 1856.
20000	Vale of Towy (ld.), Llangunnor, Carmarthen	⅜	1¼	.....	..... 0 3 3 ... 0	1 3—May 8, 1856.
10500	Welsh Potosi (silver-lead), Talybont, Card..	5	6	.....	..... 1 0 0 ... 0	5 0—July 16, 1855.
2000	Ditto (New Shares of 5l. each)	3	3½	.....	..... 0 12 0 ... 0	3 0—July 16, 1855.
6000	West Basset (copper), Illogan*	1½	31	30	..... 9 2 0 ... 0	13 6—Sept. 17, 1856.
256	West Caradon (copper), Liskeard	20	130	.....	..... 274 5 0 ... 5	0 0—Aug. 22, 1855.
256	West Damsel (copper), Gwennap	£10 7	90	85 90	..... 12 6 0 ... 2	0 0—May 14, 1855.
1024	West Providence (tin), St. Erth+	5	20	.....	..... 26 15 0 ... 0	15 0—July 3, 1856.
400	West Wheal Seton (copper), Camborne* ...	38½	225	220 230	..... 46 16 0 ... 6	0 0—Aug. 11, 1856.
1228	Wheal Arthur (copper), Calstock	7	5⅛	.....	..... 6 10 0 ... 0	10 0—Oct. 25, 1855.
240	Wheal Bal (tin), St. Just	6½	—	.....	..... 2 0 0 ... 1	0 0—Nov. 14, 1855.
512	Wheal Basset (copper), Illogan*	5⅛	295	285 290	..... 415 16 0 ... 10	0 0—Aug. 5, 1856.
256	Wheal Buller (copper), Redruth*	5	305	330	..... 811 5 0 ... 15	0 0—Sept. 16, 1856.
1024	Wheal Charlotte, Perranuthnoe	3⅜	6½	.....	..... 1 10 0 ... 0	10 0—Sept. 9, 1855.
250	Wheal Clifford (copper), Gwennap	—	300	440 450	..... 12 0 0 ... 3	0 0—June 17, 1856.
5700	Wheal Exmouth and Adams United .....4l.	14s.	8½	.....	..... 2 2 0 ... 0	3 0—Aug. 20, 1856.
5000	Wheal Fortescue, Bodmin	nil.	1	.....	..... 0 2 4 ... 0	1 6—Jan. 14, 1856.
128	Wheal Friendship (copper), Devon	50	102½	.....	.....2375 10 0 ... 8	0 0—May 10, 1854.
512	Wheal Jane (silver-lead), Kea	3½	20	16	..... 4 10 0 ... 1	0 0—Oct. 25, 1853.
1024	Wheal Kitty (tin), Uny Lelant	£1 7 2	12	10 10½	..... 2 10 0 ... 0	10 0—Sept. 18, 1856.
430	Wheal Loyel (tin), Wendron	33	20	.....	..... 30 0 0 ... 2	0 0—Aug. 9, 1854.
448	Wheal Margaret (tin), Uny Lelant+	10¾	42½	.....	..... 67 0 0 ... 2	0 0—Aug. 26, 1856.
1024	Wheal Mary Ann (lead), Menheniot+	3⅜	39	36½ xd	..... 19 12 6 ... 2	0 0—June 17, 1856.
80	Wheal Owles, St. Just, Cornwall	70	260	.....	..... 191 8 0 ... 6	5 0—Aug. 15, 1856.
210	Wheal Reeth (tin), Uny Lelant	24¼	11⅛	.....	..... 40 10 0 ... 3	0 0—Aug. 23, 1852.
198	Wheal Seton (tin, copper), Camborne*	107	180	.....	..... 269 10 0 ... 3	0 0—Aug. 11, 1856.
520	Wheal Trelawny (silver-lead), Liskeard ...	8⅞	22½	21 22	..... 50 10 0 ... 1	0 0—Apr. 28, 1856.
1024	Wheal Tremayne (tin, copper), Gwinear ...	9⅜	4	.....	..... 10 2 6 ... 0	7 6—Jan. 11, 1854.
4096	Wheal Wrey (lead), St. Ive+	1l. 9s.	8	8 8⅛	..... 1 17 0 ... 0	7 0—Aug. 19, 1856.
5000	Wicklow (copper), Wicklow	5	29	.....	..... 25 13 0 ... 0	10 0—July 10, 1856.

[* Dividends paid every two months. + Dividends paid every three months.]

FOREIGN MINES.

5000	Alten Mining Company (copper), Norway .	£14½	3	3	.....	4 5 0 ... 0	15 0—Nov. 21, 1853.
51886	Baden, Grand Duchy of	1	¼	.....	.....	0 1 0 ... 0	1 0—Nov. 6, 1852.
10000	Brazilian Imperial (gold), Brazil	26½	3	2⅜ 3	.....	34 17 6 ... 0	10 0—Dec. 1844.
2464	Burra Burra (copper), South Australia.....	5	125	.....	.....	160 0 0 ... 5	0 0—Dec. 13, 1855.
12000	Cobre Copper Company (copper), Cuba ...	40	58	55 58	.....	81 12 0 ... 3	0 0—July 29, 1856.
100000	Colonial Gold, Australia	1	⅜	.....	.....	0 1 6 ... 0	1 6—Mar. 28, 1854.
10000	Copiapo Mining Company (copper), Chili .	16	18	16 18	.....	5 8 0 ... 0	10 0—May 9, 1856.
20000	General Min. Assoc. (iron, coal), Nova Scotia	20	15	14 15	.....	9 10 0 ... 0	10 0—June 26, 1856.
15000	Linares (lead), Pozo Ancho, Spain	3	8	7 8	.....	3 15 6 ... 0	5 0—Sept. 18, 1856.
10000	Lusitanian (of Portugal)	1¼	1½	1 1⅝	.....	0 4 3 ... 0	1 9—Sept. 3, 1856.
103815	Mariquita and New Granada	1	⅜	⅛ ⅜	.....	0 2 0 ... 0	1 0—July 27, 1853.
36000	Obernhof (lead), Nassau	1	⅛	.....	.....	0 1 0 ... 0	1 0—June 29, 1853.
25000	Peninsular Mining Company	⅜	⅛	⅛ ⅜	.....	0 2 6 ... 0	2 6—Sept. 29, 1855.
10000	Pontgibaud (silver-lead), France	20	11	9 11	.....	1 0 0 ... 1	0 0—June 26, 1855.
7000	Royal Santiago (copper), Cuba.....	12¾	2⅜	2⅛ 2⅜	.....	33 0 0 ... 1	5 0—July 12, 1848.
104000	San Fernando (silver-lead), Linares	1	3s. 6d.	.....	.....	0 1 9 ... 0	0 7—June 30, 1854.
11000	St. John del Rey (gold), Brazil	15	23	21 23	.....	33 7 6 ... 1	10 0—June 15, 1856.
43174	United Mexican (silver), Mexico .....Av.	28¼	4¼	3⅝ 4¼	.....	1 16 6 ... 0	4 0—Feb. 14, 1853.
70000	Waller (gold), Goochland Co., Virginia.....	1	⅛	.....	.....	0 0 9 ... 0	6 9—July 2, 1855.
30000	Mexican and South American Smelting Co..	9	4⅜	4⅛ 4⅜	.....	6 15 0 ... 0	7 6—Dec. 12, 1855.
88676	North British Australasian	1	⅜	⅜ ⅜	.....	0 1 8 ... 0	1 0—Apr. 17, 1855.

NON-DIVIDEND FOREIGN MINES.

Shares.		Paid.	Last Price.	Present.
20000	Acadian Charcoal Iron (Limited)	2 ...	2⅛ ...	2⅛ 2½
75000	Adelaide Land and Gold Com...	2 ...	⅛ ...	...
35000	Almaden (silver-lead), Spain ...	2 ...	1⅞ ...	1½ 1⅝
50000	Chancellorsville Freehold.....	1 ...	⅜ ...	⅛ ⅜
54860	Cologne Mining Company	1 ...	— ...	...
124100	Fort Bowen, New Granada ...	1¼ ...	⅛ ...	⅛

MINES WHICH HAVE SOLD ORES.

Shares.		Paid.	Last Price.	Present.
6000	Abbey Consols (lead), Cardigan.	9s. ...	1⅜ ...	1½
1024	Aberdovey (lead), Merioneth ...	2¼ ...	— ...	...
6930	Altgoed Consols Slate Quarry .	2½ ...	⅛ ...	...
940	Balnoon Con. (tin), Uny Lelant	3⅞ ...	4 ...	4
12000	Ballygoneen (lead), Wicklow ..	1 ...	⅜ ...	...
4000	Ballyvirgin, Co. Clare.....	£1 14...	3½ ...	...
10000	Bampfylde (copper), Devon	⅛ ...	⅜ ...	...
3000	Basset Graze United (cop.), Kea	2 ...	2 ...	1½ 1⅝
4000	Bedford Consols	7s. ...	⅜ ...	...
7000	Beeralston United, Devon	⅛ ...	⅛ ...	...
508	Bell and Lanarth, Gwennap ...	11 ...	2 ...	...
2200	Benderg (Limited)	⅛ ...	⅛ ...	⅜ ⅛
5000	Bodewi, South Wales	£1 7 ...	⅛ ...	...
1000	Boiling Well (copper)	13 ...	⅜ ...	...
4096	Boringdon Consols, Plympton.	4⅛ ...	⅛ ...	...
4000	Bronfloyd (lead), Wales	4 ...	2⅛ ...	...
420	Budnick Consols (tin), Perran .	2⅛ ...	3 ...	...
6400	Buller and Basset United	1⅞ ...	4 ...	4 4⅛
812	Butterdon (lead)	£6 8 ...	3 ...	...
5000	Cae-Cynon, Cardiganshire.....10s.	6d.....	⅜	...
3384	Calstock Consols (copper)	4½ ...	2½ ...	...
2115	Calstock United (tin and cop.).	£6 2 ...	⅜ ...	⅜
1300	Camborne Consols.....	13 ...	4 ...	...
64	Cambrian (gold)	62½ ...	— ...	...
6000	Camdwr Mawr (lead, copper)..	£1 2 ...	— ...	...
32	Camel Quarry	305 ...	280 ...	...
1024	Caradon Consols, St. Cleer	10 ...	7½ ...	...
229	Cargoll, Newlyn.....	25 ...	8½ ...	...
50000	Carnarvonshire Slate	1 ...	1⅛ ...	...
5000	Carnewas (lead, cop.), Mawgan	⅛ ...	⅛ ...	⅛

Shares.		Paid.	Last Price.	Present.
1055	Carvannall (copper), Gwennap.	11 ...	9 ...	8 8½
6400	Carvath United, St. Austell ...	2½ ...	2½ ...	...
8000	Catherine and Jane Consols ...	⅜ ...	⅜ ...	...
6000	Caylan, North Wales	£2 3 ...	1⅜ ...	...
6000	Cefn Gwyn (sil.-ld.), Cardigan.	1 ...	1 ...	⅛ ⅜
2000	Clara (lead), Cardiganshire ...	£1 8 ...	1⅜ ...	...
1024	Clijah & Wentworth (tin, cop.).	17½ ...	11 ...	10½ 11
8000	Clowance Wood, Gwinear	8s. ...	⅜ ...	...
2000	Coed Mawr Pool (ld.), Llanrwst	6⅞ ...	⅜ ...	...
1600	Collacombe (copper)	10 ...	45 ...	...
15000	Cennemara (sil.-lead), Galway.	4 ...	⅜ ...	...
2510	Cook's Kitchen, Illogan	£15 18 9...	2 ...	1⅜ 1½
20000	Coosheen (copper), Cork.....	1 ...	⅜ ...	...
256	Copper Hill.....	33 ...	110 ...	...
1055	Craddock Moor (cop.), St Cleer.	8 ...	45 ...	40 41
36000	Craignuir (cobalt and nickel) ..	1s. 6d...	⅛ ...	...
12300	Cross-gill and Tees Head.....	⅛ ...	⅛ ...	...
6400	Crow Hill, St. Stephen's	1⅛ ...	⅜ ...	...
9000	Cubert (silver-lead), Cornwall..	2⅜ ...	⅜ ...	...
10000	Cwm Daren (ld.),Cardiganshire	14s. ...	⅛ ...	⅛
6700	Cwmdyle Rock and Green Lake	3⅛ ...	⅜ ...	...
1000	Cwm Erfin (lead) Cardiganah..	8 ...	1⅛ ...	...
6000	Cwm Sebon	£2 11 6...	1⅛ ...	1⅛
3000	Dalrhiew (cop., lead), Brecon..	2⅜ ...	— ...	...
1000	Daren (sil.-lead), Cardiganshire	6 ...	2⅛ ...	...
1400	Derwent (sil.-lead), Durham ...	60 ...	— ...	...
4096	Devon & Cornwall United (cop..	£4 0 9...	3⅜ ...	...
3907	Devon and Courtenay (copper) .	⅜ ...	⅜ ...	⅜ ⅝
2695	Devon Barra Burra (copper) ...	£4 19 ...	2⅛ ...	...
10000	Devon Tin Mines, Dartmoor ...	1⅛ ...	— ...	...
4566	Devon Wheal Buller	£1 10 6...	⅛ ...	⅛ ⅜

Shares.		Paid.	Last Price.	Present.
14000	Dhurode (copper), Ireland	1 ...	⅛ ...	...
863	Duke of Cornwall, Lostwithiel..£	21 19...	19 ...	...
13600	Dunsley Wheal Phœnix	1 ...	1 ...	...
3000	Dyfngwm (lead), Wales.....	£11 11 6...	11 ...	11¼ 11⅝
256	Eaglebrook, Llanphangel, Card.	40 ...	19 ...	...
4096	East Alfred Consols	£1 1 6...	⅛ ...	⅛ ⅜
100	E. Ballenwidden (tin), Sancreed	7 ...	— ...	...
256	East Basset (copper), Redruth..	47 ...	40⅛ ...	...
4200	East Birch Tor, Dartmoor	5 ...	5 ...	...
5000	East Black Craig, Kirkcudbright	⅛ ...	⅛ ...	...
1024	East Buller (copper), Redruth..	12 ...	4⅜ ...	2⅜ 3
1024	East Garras (lead), St. Clement	⅛ ...	1 ...	...
1024	East Gold-cope (copper)	⅛ ...	3 ...	...
4000	E. Gunnis Lake & S. Bedf. (cop.)	3⅛ ...	1⅛ ...	...
5000	East Hender (copper), Crowan.	⅛ ...	1⅛ ...	1 1⅛
5000	E. Rosewarne(cop.,tin),Gwinear	⅛ ...	1⅛ ...	...
9000	East Tamar (sil.-ld.), Beerferris	£2 14 6...	⅜ ...	...
256	East Tolgus (copper), Redruth.	31 ...	50 ...	45 50
2048	East Wheal George, Walkhamp.	3⅛ ...	— ...	...
10000	East Wheal Robert	⅛ ...	⅛ ...	...
1035	East Wheal Rose (silver-lead)..	31⅛ ...	13 ...	14
4000	East Wheal Russell, Tavistock.	£4 3 ...	1⅜ ...	...
2988	East Wheal Vor (tin)	3⅛ ...	⅜ ...	...
4096	East Wheal Wrey	9s. 6d....	⅛ ...	...
1280	Esgair Llee (Limited)	10 ...	10⅛ ...	10 10¼
1440	Exmouth Consols (copper)	⅜ ...	1 ...	...
5000	Fee Donald (lead, antimony) ...6s.	6d.....	⅛	...
4000	Fox Tor (tin), Altarnun	1 ...	⅛ ...	...
5000	Frank Mills, Devon	2 ...	3⅛ ...	2⅜ 2⅝
5000	Gallt-y-Ffrith-Rhedyn (Limited)	3 ...	3 ...	...
5000	Garreg (lead), Flint	£2 9 6...	⅛ ...	...
4000	Gawton (copper), Tavistock ...	3⅛ ...	1⅜ ...	1⅛ 1⅜
6000	Gellirheiron (sil.-ld.), Cardigan	1 ...	⅛ ...	...
128	Gernick.....	100 ...	40 ...	...
1024	Gilmar (tin), St. Erth	6⅜ ...	2 ...	...
2000	Goginan (lead), Cardiganshire..	8 ...	4 ...	...
6000	Gorn (lead), Llanidloes	2s. ...	1 ...	...
243	Grambler and St. Aubyn (cop.)103⅛	...	70 ...	60 70
900	Great Beam (tin), St. Austell...	20 ...	9 ...	...
4000	Great Cowarch, Merioneth	4⅜ ...	1 ...	...
30000	Great Crinnis (cop.), St. Austell	1 ...	⅜ ...	...
4000	Great Dowgas	3⅛ ...	3⅜ ...	...
15372	Great Hewas United	£1 17 ...	⅜ ...	⅜ ⅝
14956	Great Onslow Con., Camelford.	1 ...	⅛ ...	...
1024	Gt. Sheba Con., Stoke Climsland	23 ...	2 ...	...
14000	Gt. Tregune Consols, Altarnun.	1 ...	2⅜ ...	...
10000	Great Treveddoe.....	2 ...	2⅜ ...	...
5120	Great Wheal Alfred, Phillack..£9	18 1...	13 ...	14 14⅛
5120	Great Wheal Baddern (tin).....	£3 8 6...	⅜ ...	...
6000	Gt. Wh. Busy (cop. & tin), Kenwyn	2⅜ ...	2⅜ ...	3
1024	Great Wheal Fortune, Breage£	18 18 6...	6⅜ ...	...
16000	Grey Mare (iron, &c.), Cornwall	2s. 9d...	⅜ ...	...
20480	Gunnis Lake	1⅛ ...	1 ...	...
5000	Gwrda (lead), Wales.....	⅜ ...	⅜ ...	...
9000	Gwydyr Park Consols, Llanrwst	7s. ...	⅜ ...	⅛ ⅜
512	Halamanning and Croft Gothal	104⅛ ...	10 ...	...
8192	Hawkmoor (tin, cop.), Calstock £	1 6 ...	⅜ ...	...
2048	Helvellyn Consols (copper)	1 ...	1 ...